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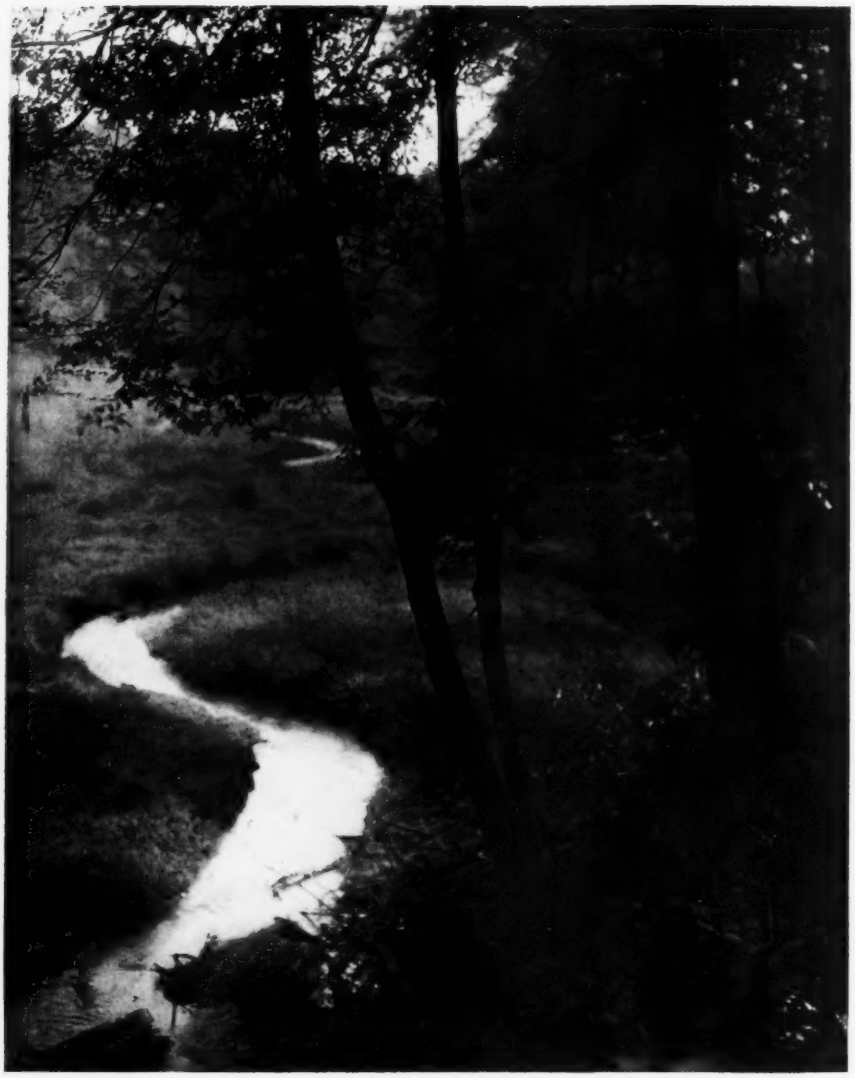

WILLIAM T. KNOX
WHERE THE BROOK WINDS THROUGH THE MEADOW
THIRD AMERICAN PHOTOGRAPHIC SALON

PHOTO-ERA

The American Journal of Photography

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# THE THIRD AMERICAN PHOTOGRAPHIC SALON

WILLIAM HOWE DOWNES

*Art Editor of the Boston Transcript*

THE Third American Photographic Salon, which, at this writing, is still on its circuit of the chief cities, is held under the auspices of the American Federation of Photographic Societies, comprising twelve organizations in as many different places. From the 275 pictures in this exhibition the editor of PHOTO-ERA has chosen fourteen representative specimens of native work for reproduction here, a group of photographs which shows a pleasant variety of landscape and figure motives, and which may be said to represent fairly the modern tendencies of artistic pictorial photography. One of these tendencies is to create illustrations of life — not anecdotic subjects, with a beginning, middle and end of the story, involving too much obvious machinery, but illustrations in the sense that the works of the Central Italian painters of the Renaissance are illustrative rather than decorative, as has been ingeniously set forth by Mr. Berenson, who, however, speaks with some unwarranted scorn of "mere" illustrators. I fancy that there is a future for photographic illustration, but I do not mean the kind of illustration that is hitched up with letter-press as a running-mate. What I have in mind is the illustrating, not of a story, not of any written text, but of the "real thing," which is life itself. But let us adduce some concrete examples.

What makes Mr. Brookins's "Transport of Man" so interesting as a picture? It is a scene which is sordid enough, common and familiar enough, and in actuality would be viewed inattentively, if not impatiently. I am not quite certain whether the artist is to be credited with what is good in the composition of it, for, of course, we all know that good compositions will sometimes happen in the most casual manner; but it is certain that he knew he had got a good composition, once the plate was developed. The contrasts of light and dark spaces in this picture are distinctly pictorial; the steam and smoke, the traces of snow on the ground, the shining rails, all contribute to the effect; and, as in many paintings (a notable example being Turner's famous "Rain, Steam and Speed, Great Western Railway," in the National Gallery), objects in themselves of no beauty of form, whatever, are so brought into the scheme of light and shade, as to assume an undeniable pictorial value. As an illustration, then, we have in

WILLIAM H. PHILLIPS — IN TURKISH WATERS

this plate a record of how a Chicago railroad-yard looks — a network of tracks, long strings of cars, a puffing locomotive and a jumble of buildings in the background — truly a most unpromising subject, it would seem, yet, as is evident, capable of being made into a picture of artistic merit, and so, finally, another proof added to the already abundant testimony of every day's experience that the motive is of little consequence compared with its treatment, and that all is grist that comes to the art-mill.

Somewhat like Mr. Brookins's picture in spirit is Mr. Will D. Brodhun's "Unofficial Inspector," with the sitting figure of an idle man perched on a high scaffolding in the foreground, watching the work of the teamsters below him. It seems to tell a story, but it does so in such an ambiguous manner as to leave

WILL D. BRODHUN AN UNOFFICIAL INSPECTOR
THIRD AMERICAN PHOTOGRAPHIC SALON

the purport of it largely to the imagination of the observer, a peculiarity which, though tantalizing, has its artistic parallel in literary fiction, which is usually deemed superior to the opposite extreme of excessive definiteness. One can see readily that there are minor points in which Mr. Brodhun's composition might be improved; but I think the vagueness of his intention, so far as the story goes, may be set down as a merit. That there may or may not be a story is an open question; it is possible to read a story into the picture, but then we must not forget the Needy Knife-grinder, who dashes our romance to the ground with his: "Story? God bless you, I 've none to tell, sir."

Dr. Albert R. Benedict's picture of "The Man on the Box" leaves us in no doubt; his hero is not dreaming of anything more romantic than the day's wage; in fact, a cabby seems almost more like a piece of mechanism than a human individual. But we must compliment the artist on the extremely picturesque sil-

houette of this picture, in which the dark masses take their places so well against the light, and in which the relative scale of all the objects is so well maintained.

Over-obviousness of intention is exemplified in the picture by Katherine Bingham, entitled "Responsibility." This is a type of the illustration which deliberately and definitely sets out to impress its sentiment upon us, and oh, what a threadbare, hackneyed, stale and thousandth-told tale it tells! I cannot say it is badly done in this instance; as a photograph it must take high rank among the best; but I feel that it ought to be accompanied by low, tremulous music on the violins, by a hollow bass voice saying, "My che-y-l-d, where is my che-y-l-d?" and the footlights should be turned down, while even the newsboys in the gallery cease eating peanuts to indulge their emotion.

G. C. Elmberger's "The Gravel-gatherers" celebrates the artistical aspects of labor in the open; the good points about the photograph are numerous. It is a first-rate composition, not at all usual; the atmosphere is delightful, the gray tone of the print very handsome; I could hardly suggest any improvement; even the men's suspenders seem to justify their existence. The broken reflections on the surface of the water are almost worthy of Winslow Homer. George Buttler's "Waiting for a Load" is another labor-motive, simply made up, with a good suggestion of the textures of the loosely-strewn hay, and an attractive veil of gray atmosphere softening the distance.

Lee H. Keller's "The Still Night" shows a bit of a snow-covered New York square or park by the spectral light of the arc-lamps, and brings out in an interesting way the curious pattern of cast shadows of tree stems and boughs upon the trodden surface of the snow. A remarkable snowy landscape is John Chislett's "Snow Shadows." Of all the wonderful photographs of this class of subjects, this is the most wonderful. The delicacy and beauty of the gradations in the shadows and texture of the snow are truly extraordinary. Again, I must commend the "Winter Stream," by R. E. Weeks, a photograph which is to be set down as poetical in its exquisite lines, its suggestions of nature's whimsical loveliness.

The trees and the stream in William T. Knox's "Where the Brook Winds Through the Meadow" are sylvan and enticing. To say that this landscape makes us long to be in such a spot is praise enough. "The Dawn of Day," by William H. Zerbe, is a landscape in which a herd of cows fording a creek play an important part. It is an agreeable pastoral subject. "In Turkish Waters," by William H. Phillips, is a marine piece, in which the details are slurred and the masses make the picture. Would not a little clearer definition have made this more interesting?

"A Laborer," by W. H. Evans, suffers slightly from the self-consciousness of the model. The lines are a bit top-heavy where the figure and its burden come against the sky. Louis Fleckenstein's "A Maid of the Frontier" is a charming girl's head, with flowing hair framing features of extreme prettiness; the eyes and mouth especially are fine. Dante Gabriel Rossetti's models never had such pretty lips as this girl's.

WILLIAM H. ZERBE

THE DAWN OF DAY

THIRD AMERICAN PHOTOGRAPHIC SALON

# THE GUM-BICHROMATE PROCESS

B. F. LANGLAND

*A Paper Read before the Wisconsin Camera Club*

WHEN the average amateur sees the above title over an article in his photographic magazine he usually passes it by without further attention, thinking it some of that terribly scientific "stuff" that no one can understand, except perhaps a few of those fellows who have nothing else to do than to study abstruse chemical problems. But that is where he is mistaken; if he would look into the process a little, he would find that instead of being an extremely difficult and expensive one, as many are apt to believe, it is really very simple and remarkably cheap when compared with many of the other printing-methods. However, much that has been published concerning it would lead the reader to think it a very complicated and expensive method of making prints.

The object of my demonstration to-night is to show how mistaken this impression is, and to prove what a simple printing-method the gum-bichromate process really is. I shall not go into its history — except to say that it is one of the oldest printing-methods known, dating back to 1855 — nor enter into an elaborate explanation of the chemistry of the process, nor expatiate on its various modifications, as almost every worker in gum has some pet variation which he thinks produces better results than the other fellows' ways.

The process is founded on the fact that gum arabic, when mixed with bichromate of potassium and exposed to light, becomes insoluble in water. So, if a sheet of paper is coated with a mixture of gum arabic, bichromate of potassium and some suitable pigment, and is exposed to light under a negative, the coating becomes more or less insoluble in proportion to the amount of light that has acted upon it. Then if the exposed paper is placed in a tray of water, the coating, protected from the action of light by the denser proportions of the negative, will dissolve away, leaving on the paper that which has been made insoluble by the action of light, thus giving a positive print in color. By this process prints in any color, or in two or more colors, can be made easily, and it has the great advantage of allowing the worker greater scope for modifications, changes and for the display of individuality than any of the other printing-methods. Prints by this medium are as permanent as anything made on paper can be.

The essential chemicals needed for gum printing are few and cheap; viz., gum arabic, bichromate of potassium and the pigments for coloring. Gum arabic costs seventy-five cents per pound, which would last a lifetime, while an ounce will answer to start with. Bichromate of potassium costs forty cents per ounce, an ample quantity for a beginner. The pigments, or colors, can be very cheap or quite expensive, but, fortunately, the cheap colors make just as good prints as the expensive ones. A large package of lampblack can be obtained for five cents, and Venetian red, burnt umber, yellows, blues and many other colors, such as the house-painters use, can be had for a few cents per pound.

Any paper that will stand soaking in water can be used, and as far as my experience goes, sizing it is not necessary. There is a cheap grade of drawing-paper that answers very well. I obtained a package of a hundred sheets, 8 x 10 inches in size, for twenty cents. Many of my best prints have been made on this paper.

The brush I use for coating the paper is an ordinary bristle brush an inch and one-half in width. I have used it for several years, and, if my recollection is correct, it cost me ten cents.

Almost any kind of a cup or saucer may be used for mixing the necessary solutions, but a small mortar and pestle will be found very convenient. A few thumb-tacks or pins, a piece of pine board to pin the paper on for coating, a tray that will stand hot water and a small round camel's-hair brush for local development represent the sum total of what is essential for the making of a gum print. Of course, there are many things that are convenient to have at hand when working in gum. It can be made an expensive process, if one chooses to make it so, but, as far as I am able to judge, just as good prints can be made with the cheapest outfit as can be made with the most expensive. It is the man who uses the outfit, and not the outfit, that makes the pictures.

When the desire to make gum prints seizes me, I take a quantity of gum arabic, see that it is clean, place it in a small wide-mouthed bottle, put in cold water — just enough to a little more than cover the gum — then put it away for a day or two (gum arabic dissolves slowly). After the gum is dissolved, I sometimes strain it through a piece of muslin, although this is not strictly necessary. This gum solution will keep fairly well for a month or more.

For the bichromate solution I take a few of the crystals and place them in a bottle with a few ounces of water. If the crystals all dissolve, I put in enough more so that a few will remain undissolved; then I am sure I have a saturated solution. This solution keeps very well if placed in dark-colored bottles, or if kept in a dark place.

When the gum has dissolved, I pour a little of it into the mortar, and then put in as much of the pigment I am going to use as I think will give me the darkest tint wanted in the finished print, for in this process one begins with the darkest shadows and washes down to the highest lights. I grind up the gum and pigment thoroughly, then try the color on a piece of waste paper, and, if too light, add more pigment, and if too dark, add more gum. Finally, I add as much of the bichromate solution as is necessary to thin down the gum and pigment to that state of fluidity which is required for making a successful coating. It should be about the consistency of maple syrup. A few trials will teach one more about this than any amount of description. Most writers on gum printing give the impression that coating the paper is a very difficult matter, but it will not be found so if the solution is of the right consistency.

To coat the paper, pin it to the coating-board, stretching it as smoothly as possible; fill the brush fairly full of the coating-solution — better a little too much than too little — and as rapidly as possible. Then, beginning at the top, brush lightly but firmly from left to right, having each stroke slightly overlap

ROBERT E. WEEKS — A WINTER STREAM

the previous one, until the bottom is reached; finally, repeat the operation, brushing from top to bottom, more and more lightly, as the coating dries rapidly. The coating-process should be completed within a minute or two. Then hang the paper up in the dark to dry. This process will take from fifteen to thirty minutes, when the paper can be put away in a book under pressure until wanted for printing.

The coating can be done in full lamplight or gaslight, as the coating-solution is not sensitive to light while wet, and not at all to gaslight, as far as I have observed.

Paper coated in this matter will keep in good condition for a month or six weeks if kept free from moisture. In fact, I believe that paper kept for a week or so after coating works better than that which has been freshly sensitized.

W. H. EVANS — A LABORER

Printing the paper, when the lighter colored pigments are used, can be judged about as blue prints or platinum prints are judged. When the shadow portions show quite distinctly, the printing has been sufficient. But with the darker colors, no image is visible until after development. Gum-bichromate paper is of about the same sensitiveness as Solio or similar printing-out papers, and if a piece of Solio is printed out under the same negative, or one of like density, to about the depth usually printed for proofs on these papers, the gum paper exposed for the same length of time will be properly printed.

Development should ordinarily take place immediately after printing, especially if the print has been fully exposed, as the chemical action set up by the exposure to light continues, and the print, if kept for any length of time, will become insoluble. This continuation of the chemical action has some advan-

tages, as, if you are pressed for time during daylight, you can give a short exposure in the morning, and, depending upon the continuation of the chemical action to complete exposure, develop at night.

The developing is done in water of various temperatures. A print properly exposed, placed face down in a tray of cold water, will develop without further attention in from five to thirty minutes. A print which it is desired to change, modify or develop by the brush, should have a longer exposure than one which is to develop by itself, as in that way you have a greater opportunity to work on the print. Since the power to modify the prints in development is one of the principal advantages of the gum process, care should be taken rather to overexpose than otherwise.

After the prints have been in the water for two or three minutes, turn them face up, and, if the portions of the print protected from light by the edges of the printing-frame have begun to dissolve away, you may be confident that the coating is in good condition. Then if you are going to develop by the brush method, leave the print in the tray, face up, under water. Great care should be used in making the first touches with the brush, for, if the print should happen to be underexposed, a touch might spoil it. If anything like the proper exposure has been given, the brush may be used very freely while the print is under water. If the print is too slow in coming up, raise the temperature by adding warm water. In extreme cases boiling water may have to be used. When the print has been developed to your satisfaction, remove it from the water and place it, face up, on some inclined surface to drain and dry.

Fixing is unnecessary, as the bichromate that remains in the print will do no harm and the slight yellow stain is agreeable rather than otherwise. But if for any reason you should wish to remove the remaining bichromate, it may be done by placing the print, for a few minutes, in a five per cent alum or hypo bath.

## BROMIDE PRINTS BY CONTACT

T. H. FERGUSON

EVERY photographer who uses bromide paper knows that the weaker the negative the weaker should be the light in which it is printed, in order to increase the contrast. The best way to weaken the light is to increase the distance from its source. Two feet and six feet will be found convenient distances, and there is little or no advantage to be gained from having more than these two points for exposing. With the same negative, exposures made at a distance of six feet will require nine times as long as those made at two feet. This is the only variation that should ever be made, alterations in the composition of the developer only leading to the production of feeble, imperfectly-developed prints.

A great deal can often be effected, however, by local treatment during exposure. For this three things are wanted — a sheet of glass, some black paper,

LOUIS FLECKENSTEIN
A MAID OF THE FRONTIER
THIRD AMERICAN PHOTOGRAPHIC SALON

and some cardboard. In most cases the cardboard alone will do all that is required. After giving to the whole of the plate the exposure necessary for the parts of the negative that need the least, they may be screened by holding the cardboard in front of them while parts which want further exposure receive it. The cardboard need not be held in contact with the negative — in fact, it is better not to do so — but should be kept moving slightly. If it is a patch in the middle of the negative that we wish to screen, a piece of black paper a little smaller than the part to be screened must be cut out, attached to the middle of the glass plate, and this held in front of the negative. It is well to hold cardboard or glass so that the actual shadow can be seen on the negative, or the shading may turn out to have been carried too far or not far enough.

It is not always realized how very much can be done in this way without a sign of it showing. As an example I may mention that I have a negative of a large hall with a dark roof, and lit by sunshine streaming in from windows all down one side of it. I can give twelve seconds to the timbered roof, and then with a piece of cardboard with a straight edge held diagonally so as to expose the floor and the windows mostly, this part can have *four minutes* more, moving the cardboard so as to avoid a hard line. The final print gives no indication of any local treatment, and conveys a good idea of the interior.

The developer which seems to be the best for bromide paper — and I have yet to find a make for which it is unsuited — is amidol. I started by using the formula given below, and except that I prefer it more dilute, as being more economical, there seems no need for a change. It is made up of:

| | |
|---|---|
| Amidol | 25 grains |
| Sodium sulphite crystals | 330 " |
| Potassium bromide (ten per cent solution) | 5 " |
| Water | 20 ounces |

By crushing the sulphite it dissolves almost directly in the water, and when it is dissolved, the amidol and bromide are added. After allowing a minute or two for the amidol to dissolve, the liquid is ready.

I am convinced that where so many workers in bromide go astray is that they import into the development of bromide prints notions gathered from the development of negatives. This will not do. We have got to put aside all ideas of modifying the developer and of stopping development sooner or later, since these all interfere with the color and vigor of the result if they are put into practice. The print may be soaked in water till quite limp, and should then have the developer poured over it. I do not care to use the above developer for more than two prints, so as little as is needed to cover the print is taken, and, after development, is not poured back to the general bulk, but put into a measure for use with one more print, and is then thrown away. By wetting the print first, an ounce will be found ample for a half-plate print, so the developer is not a dear one. The great thing in developing is to carry it right on until the development seems to stop. It does not quite stop, but it slows down so much that a minute more or less in the developer at that stage will make no difference. This is a sign that the

development is complete, and the print may be fixed. If the print is a poor one the exposure must be increased or decreased, as it may suggest. The hypo seems to darken the dark parts of the print a little, but not very much.

In the previous paragraph I have pointed out that we cannot modify the developer and stop development before it is fully accomplished, since either course will interfere with the color or contrast of the print. In doing so I am supposing that we wish to make bright, clear, strong prints — the sort that the beginner, at least, wishes to make. Of course, if delicate gray prints or other modifications are wanted, we can get them by making suitable alterations, diluting the developer, over-exposing and stopping development at an early stage, or by changing the composition of the developer. But this would form material for an article in itself.

An acid fixing-bath I always use, adding to each pint of the hypo solution (four ounces to the pint) an ounce of the stock acid solution made up of

| | |
|---|---|
| Sodium sulphite | 2 ounces |
| Water | 10 " |

When dissolved, two drams of strong sulphuric acid are added. Prints should be left in this at least ten minutes.

The defects which have at any time come my way have been only of two kinds — poor color and brown stains. The former is caused by an excess of bromide in the developer, either from a mistake in making it up in the first instance or from using the developer too often, since developing a print increases the bromide in the developer. The latter have always occurred when the prints were left too long undisturbed in the hypo. I, therefore, prefer to move them about in it from time to time, not giving them less than ten minutes nor more than twenty.

The only cause of poor prints not already dealt with would be unsuitable negatives. The negative must be right to start with; not only must it be sharp, bright and clean, but it must have the right amount of contrast for the bromide process if it is to be used for it; and unless it does so, the prints, whatever we may do, will be poor.—*Photography, London.*

## ELMWOOD

W. PRENTISS PARKER

*(Prize Winner — Literary Competition)*

ELMWOOD is one of the most beautiful historical spots in all New England, and the fact that it still retains its old-time glory is most wonderful, considering the era of progress through which we have been passing the last ten years. We have still with us historical houses where the changes have been few, even to the surroundings, such as the Craigie-Longfellow House; a few houses in Lexington and Concord; the Fairbanks House in Dedham; the Vassal-Adams House in Quincy; the Rebecca Nourse

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House in Danvers, and several more. The majority of the colonial, historical houses have seen sad changes or entire removal. How much better it is to have one of our old landmarks taken down than to turn it over to the real-estate speculator, who, having no idea of the historical, remodels it to suit the needs of a modern tenement-house. We should be very grateful to the people who have saved for all time this beautiful home of the Lowells. It certainly is a great pleasure to unexpectedly behold an old colonial estate retaining so much of its former appearance as this has. It embodies more of the idea of the country-house of a provincial magnate than is easily supplied to the limited horizons of our old acquaintances. The splendid grove of pines is a token of the primitive forest; the noble elms seem to bend their heads as silent messengers of protection.

It has been stated that the house was built by Colonel Thomas Oliver about 1760, but as the estate was only leased by him until about 1770, when he acquired the title by purchase of the heirs of John Stratton, of Watertown, we do not give full credence to the assertion. The house is of wood, of three stories, and in itself without distinctive marks of any style of architecture. The interior woodwork is plain, and destitute of the elaborate carvings seen in the Longfellow or Apthorp houses. Thomas Oliver, the last of the Lieutenant-Governors, dwelt here during the Revolution. The house was used as a hospital after the

battle of Bunker Hill, the opposite field being used as the burying-ground for such as died here. The next occupant was Elbridge Gerry, and he will doubtless be remembered for the curious political manipulation of the map of old Massachusetts, thus being the means of introducing the word "Gerrymander" into our political vocabulary. Upon the death of Mrs. Gerry the property passed into the possession of the Reverend Charles Lowell, father of the poet. The new owner greatly improved and beautified the estate, giving it the name of "Elmwood." Dr. Lowell was pastor of the West Church in Boston for more than half a century.

The following story is told of West Church: "As a couple of Jack Tars were passing the meeting-house on a Sunday, observing the remains of the steeple which was cut down by the British troops in 1775, 'Stop, Jack,' says one of them. 'D—n my eyes, but this ship is in distress; she has struck her topmast! Let 's go aboard and lend her a hand!' Upon which they went in; but finding no assistance was required of them, they sat down until the service ended. On going out one was heard to say, 'Faith, the ship we thought in distress has the ablest pilot aboard that we have seen for many a day!'"

James Russell Lowell was born Feb. 22, 1819, was graduated at Harvard College in 1838 and entered the Harvard Law School, where he remained two years. He was admitted to the bar in 1841, but he soon gave up the profession, that he might devote himself wholly to literature. In the summer of 1851 he visited Europe, and in the winter of 1854–1855 he delivered in Boston a course of lectures on "The British Poets." On the establishment of *The Atlantic Monthly*, in 1857, Professor Lowell became the editor, a position he held about five years.

While Lowell is distinguished by the great range and versatility of his powers, the poems written on nature, the birds and all animal life breathe such a beautiful sense of love for those things that he seems almost the most human of poets. To the dandelion a verse runs:

> "My childhood's earliest thoughts are linked with thee;
> The sight of thee calls back the robins' song,
> Who, from the dark old tree
> Beside the door, sang clearly all day long;
> And I, secure in childish piety,
> Listened as if I heard an angel sing
> With news from Heaven, which he did bring
> Fresh every day to my untainted ears,
> When birds and flowers and I were happy pairs."

His great love for his home and all that a real home brought him is told in these lines:

> "Ah, dear old homestead! Count it to thy fame
> That thither many times the Painter came;
> One elm yet bears his name, a feathery tree and tall"——

The picture of the study of Professor Lowell shows the true American type of a man whose home is his castle. Surrounding him here are pictures and souve-

nirs of his family and friends, as dear to him as their memories. He was especially fond of an old clock by Richard Lowle, of Newbury, Mass., dated 1654, and the old family furniture. In 1877 he was appointed United States Minister to Spain; in 1879, Minister to England. While in England he was a great favorite, and did very much to cause the English people to think better of us Americans. While his term was not wrought with momentous questions of state and policy, he seemed to have that gracious way of winning the hearts of all with whom he came in contact. After Lowell returned from his famous career in England to his Cambridge home, in style not unlike that of the homes of Longfellow, some friends who had met him in the country-houses of England, visiting him in Cambridge, were surprised that a man so great and so famous could be content to live in what to them seemed such sordid conditions. They could not understand Republican simplicity, contrasted as it was to them with the splendor and state of high life in England.

"That portion of my life more choice to me
(Though brief, yet in itself so round and whole)
Than all the imperfect residue can be:
The artist saw his statue of the soul
Was perfect; so, with one regretful stroke,
The earthen model into fragments broke,
And without her the impoverished seasons roll."

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ELMWOOD — LOWELL'S STUDY

# THE CAMERA IN SCIENCE

FRANK COLLINS BAKER

*Photographs by Frank M. Woodruff*

AT no time in the history of book-making has the matter of illustrations been given such a prominent place as at the present. Few books or papers are now published without some kind of illustration. In scientific contributions accurate illustrating is of the greatest importance, especially when the subject is some new or otherwise notable species. Until the advent of the camera the naturalist was compelled to be content with lithographs and wood-cuts. At the present time, fortunately, he may select from a number of photographic processes that which best suits his subject or purse.

In the present paper the writer wishes to call attention to the use of the halftone in illustrating papers on the Mollusca. The mollusks usually have been pictured by means of lithographs, wood-cuts or zinc-etchings. Many of these, while fairly accurate, failed to show the exact proportions of the essential features of the shell. The personal equation is sure to creep in, and it is noteworthy that two artists seldom or never figure the same specimen alike. The photograph eliminates this personal equation and reproduces the object with lifelike fidelity.

Very few photographers seem to know how to take a good picture of a small object like a shell. The artistic feature is made to stand out in such a manner that the object for which the picture is taken is defeated; i.e., a clear definition of every part of the shell. The artist very naturally wishes to secure a shadow, as ordinarily all objects cast a shadow, and the proper adjustment of this feature is one of the fine points in a good picture. The zoölogist wishes, nay, must have, a figure without any marked shadow on the shell and without any shadow to mar the outlines. This much-desired result cannot be obtained by means of the usual methods of photography, and special apparatus must be provided. The ordinary method is to attach the object to a card, and the result is a black shadow which obscures the sharp outlines of the shell, as is seen in Fig. 2, which is very objectionable.

The method in use by the writer is as follows. The shell is attached to a clean piece of glass, which is placed an inch or two away from and in front of a white background. The camera and the background (which is attached to a wooden frame set vertically) are placed on a wide, horizontal track which allows a good play for distance, so that the picture of the object may be either enlarged or reduced. This apparatus is placed in a good light, preferably entering the room from the rear of and a little above the camera. The diaphragm is stopped to the smallest possible limit and plenty of time is given for detail. The result is such a picture as Fig. 3, in which shadows are eliminated and great detail is secured. The specimen is frequently exposed for five or ten minutes, in order to get well into the shadows and to secure all possible detail. Many times a number of exposures must be made before a really good picture is secured;

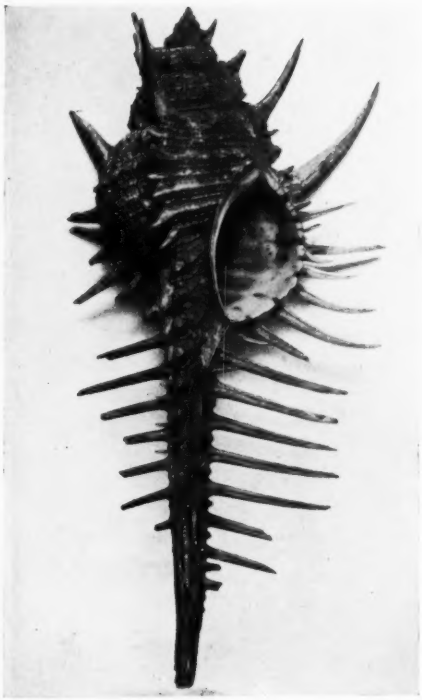


FIG. 1
SPINY ROCK SHELL — MUREX

FIG. 2
POND SNAILS — LYMNÆA
SHOWING EFFECT OF SHADOW

FIG. 3
POND SNAIL — LYMNÆA
SHOWING ABSENCE OF SHADOW

FIG. 4
TRITON SHELL — CYMATIUM

FIG. 5
DRAWING OF HARP SHELL — HARPA

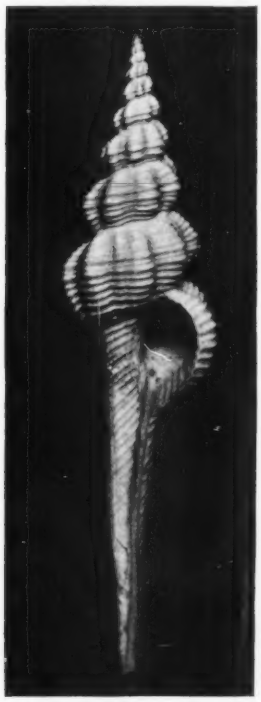


FIG. 6
SPINDE SHELL — FUSUS

FIG. 7
POND SNAIL — LYMNÆA

hence plenty of time and an abundance of patient enthusiasm are absolutely necessary in order that good results may be obtained.

It often occurs that when good negatives have been secured the photograph is spoiled for reproduction purposes by a too dark or too light a print, the first obscuring the detail and the latter failing to bring it out. Then, again, a good print may be spoiled by the half-tone makers, the result being a muddy and generally indistinct reproduction, even when printed on good photo-paper. For zoölogical figures it seems advisable to use a screen of high numerical mesh, as this gives a greater amount of detail than when a coarser mesh is used.

The figures herein shown are examples of what may be done in securing accurate and handsome figures of mollusks. Is not the figure of the Triton shell (Fig. 4) much more lifelike than the figure of the Harp shell (Fig. 5), which looks dead in comparison? The first is a picture of the object itself; the latter is an artist's idea of how the shell looks — and the artist's ideas may not be, nay, generally are not, in accord with characteristics exhibited by the specimens. I do not deny that good drawings can and have been made, but the good shell-artist is a rarity, as all who have had occasion to use their work will attest. Recently, the writer had occasion to examine the type specimens from which a certain set of figures were made, and he was amazed to discover that the figures were quite unlike the actual specimens, which could scarcely have been identified from the figures made by the artist.

There have been several notable artists who have produced very accurate illustrations of shells, one of the best being the late Dr. McConnel, who prepared the illustrations for many of the molluscan papers published by the Smithsonian Institution. Prof. E. S. Morse, of Salem, Mass., may also be mentioned as one of the best of shell-artists, being, in addition, an accomplished conchologist. His excellent drawings may be seen in the Shell Monograph of Mr. W. G. Binney, which was published by the Smithsonian Institution some forty years ago.

Of the many methods of photographic reproduction for printing-purposes, albertype, heliotype, etc., the half-tone is probably the best for all practical purposes because of its comparative cheapness, and also because of the number of times a plate may be used without damage to the figures. This process is now largely used by the Smithsonian Institution and the Academy of Natural Sciences of Philadelphia, and a large number of very excellent half-tone plates have embellished the recent publications of these two institutions, giving conclusive proof of the popularity of photographic illustrations among scientific men.

The figures illustrating this paper have been made from specimens selected at random in the museum of the Chicago Academy of Sciences, and well illustrate, it is thought, the superiority of the photograph over the drawing. A comparison of these figures with those illustrating monographs and general papers on the Mollusca ought to convince the most sceptical of the truth of this statement. These remarks apply to the external forms of shells. There are many very minute species which require drawings; and details of structure, as well as anatomical illustration, will always require the aid of the artist.

JOHN CHISLETT

SNOW SHADOWS

THIRD AMERICAN PHOTOGRAPHIC SALON

G. C. ELMBERGER — THE GRAVEL-GATHERERS
THIRD AMERICAN PHOTOGRAPHIC SALON

## KALLITYPE FOR WINTER LANDSCAPES

JAMES S. ESCOTT

THE progressive amateur who practises photography from pure love of it is usually a true artist at heart, and, as such, he will sooner or later chafe at the restrictions imposed upon him by the printing-papers on the market — the necessity of employing different processes to obtain the best results from different negatives, or the monotony consequent upon using the same kind of paper continually, even if it were possible to obtain results otherwise satisfactory thereby.

To such workers as earnestly strive to produce real pictures, and are willing to devote a little labor and patience to that end, the kallitype process offers such advantages that it should lastingly appeal to them. Its preparation and manipulation are easily within the ability of the ordinary careful amateur, and by variations in the quality and character of the paper used, the same negative may yield prints so different in texture, gradation and tone as to be a source of constant wonder and delight to the operator.

The process is not limited to a certain class of negatives either, as slight variations in the proportions of the sensitizing-solutions adapt the paper equally to negatives of thin and soft, or hard and contrasty variety, while the finished

DR. A. R. BENEDICT THE MAN ON THE BOX

prints will compare, in artistic beauty, to platinum at its best. Added to these decided advantages is one more — the process is inexpensive.

The paper itself is the most important factor in the result obtained. The specially prepared photographic papers, such as Steinbach, yield soft tones, with a tendency to cold black. Whatman's water-color paper, easily obtained in all surfaces, from smooth to very rough, offers a wide range in results — the rougher the surface the greater the tendency toward broad, sketchy effects, and warmer tones. Beautiful results may be obtained by the use of architect's drawing-paper known as "egg-shell;" it is heavy and strong, and yields rich brown

tones. Ordinary ledger-papers, such as Weston's or Scotch linen, are very useful in this process, and are more used than any other kind.

The soft Japanese papers yield prints which are the refinement of artistic elegance, but require more care in the preparation and handling, it being necessary to mount them with white dextrine, on a strong, white paper, such as ledger or bristol-board, before the sensitizing-process, and allowing them to remain on this support during printing and development; if the paper does not leave its mount during the latter process, it may be removed easily by immersing in warm water.

Japanese papers require negatives of rather strong contrasts to yield the best results. It is absolutely necessary that the Steinbach and Whatman papers be "sized" to keep the sensitizing-solution on the surface. While the other papers mentioned above can be used without sizing, the prints are so much improved by the process that the little additional trouble is well spent.

Arrowroot is especially recommended, as it not only fills the pores of the paper, but it leaves a soft deposit which renders rich half-tones and velvety blacks. To prepare such size, rub eighty grains of arrowroot flour into a stiff paste with a little cold water. Add to this, stirring constantly, sixteen ounces of hot water, and bring the solution to a boil. Now add four ounces of alcohol, stirring constantly, strain through muslin, and immerse the paper for about two minutes; then hang up to dry. Repeat this operation, hanging the paper from reversed ends, and, when thoroughly dry, it is ready for the sensitizing-solution. This is made up in four stock solutions, kept in amber bottles in a dark, cool place.

I know of no improvement over Mr. Henry Hall's formula, which is as follows:

*Solution A.*— Distilled water, five ounces; ferric oxalate, one ounce. Reverse a few times, and put away for twenty-four hours; then add forty-eight grains selected gum arabic.

*Solution B.*— Distilled water, eight ounces; ferric oxalate and potassium, one-half ounce.

*Solution C.*— Distilled water, four ounces; oxalic acid, one-half ounce. When this is dissolved, bring to a temperature of seventy-five or eighty degrees, and add, slowly, one hundred minims stronger ammonia water; then filter.

*Solution D.*— Distilled water, four ounces; bichromate of potassium, one hundred and twenty grains.

For normal negatives, use of Solution A, one ounce; Solution B, one-half ounce; Solution C, thirty minims; Solution D, four drops. Of the above, take one-half ounce and add twelve grains nitrate of silver, stirring with a glass rod until dissolved.

For harsh, contrasty negatives, use of Solution A, one ounce; Solution B, one ounce; Solution C, thirty-five minims.

For soft, thin negatives, use of Solution A, one ounce; Solution B, one-half ounce; Solution C, fifteen minims; Solution D, eight drops.

JAMES S. ESCOTT

A WINTER LANDSCAPE ON KALLITYPE PAPER

GEORGE BUTTLER WAITING FOR A LOAD
THIRD AMERICAN PHOTOGRAPHIC SALON

In preparing solution for contrasty negatives, use fourteen grains of silver instead of twelve. Apply to the paper by pouring a small pool of solution in the center, and distributing with a two or three inch camel's-hair brush bound in rubber, using no more than sufficient to cover the surface of the paper thoroughly. This operation is conducted by lamplight; and when the paper is surface-dry it is hung over a stove or placed in an oven, so that it may quickly become bone-dry. Print until outlines are fairly visible, and proceed with development.

*Developer Formula — Stock Solution.*— Distilled water, thirty-two ounces; acetate of soda, four and one-fourth ounces. Of this, take eight ounces; add tartaric acid, twelve grains; Solution D, twenty minims.

If this does not yield tones sufficiently black, add twenty-five to fifty minims of fifty per cent phosphoric acid. After thorough development, rinse, and clear for half an hour in a fresh bath composed of distilled water, eight ounces; sodium citrate, one-fourth ounce; citric acid, twenty grains. Wash thoroughly and finally fix for ten minutes in a bath composed of water, sixteen ounces; hypo, seven drams; stronger ammonia, ninety minims. Wash thoroughly and dry. Of course, a good negative is the greatest help to a good print, and should be striven for in the first place.

LEE HAMILTON KELLER THE STILL NIGHT

In photographing landscapes covered with snow, my experience has led me to the invariable use of non-halation orthochromatic plates, with a normal yellow screen. This is because of the presence of so much blue tone in the shadows and broken parts of the snow surface, which, if not corrected, would fail to give sufficient contrast to the unbroken white of the snow. I generally use Stop 16, giving full exposure, followed by full development. If the high-lights are too dense, I reduce them with persulphate of ammonia, which leaves the shadows practically untouched.

A rough-surface Whatman paper is very effective for this class of pictures, giving a wash-drawing effect, and breaking up what might be a too flat expanse of white. Rough papers also aid in securing diffusion and atmosphere. Irre-

spective of the paper used, I frequently employ one or more sheets of celluloid interposed between negative and paper. This produces sufficient diffusion, without forcing some portion of the picture too much out of focus, and suppresses detail which might be too insistent.

In making prints on Japanese papers, if considerable margin is allowed, and a mask used on the *outside* of the negative, instead of between it and the paper, a soft outline is obtained, and the finished print, especially if a warm tone is being produced, resembles in appearance an artist's proof of an etching or mezzotint-engraving. These papers should be dried between clean blotters and under pressure.

There is no greater pleasure connected with the art than to watch the development of a beautiful print on home-made paper and to realize the immense possibilities and control which lie under the hand of the worker.

A. W. ENGEL STORY-READING

# FUZZINESS

HORACE MUMMERY

THERE was a time when the excellence of a photograph, with the general public, was thought to consist in its sharpness and detail. This opinion still prevails, but with a number of workers it has given way to the idea that a picture cannot be really artistic unless it is fluffy and free from all minor forms and markings. We are told that the eyes cannot see as sharply as the camera can. This is true; but, on the other hand, provided they are attached to a sober person, they do not see with the same diffusion of focus that the lens is capable of rendering.

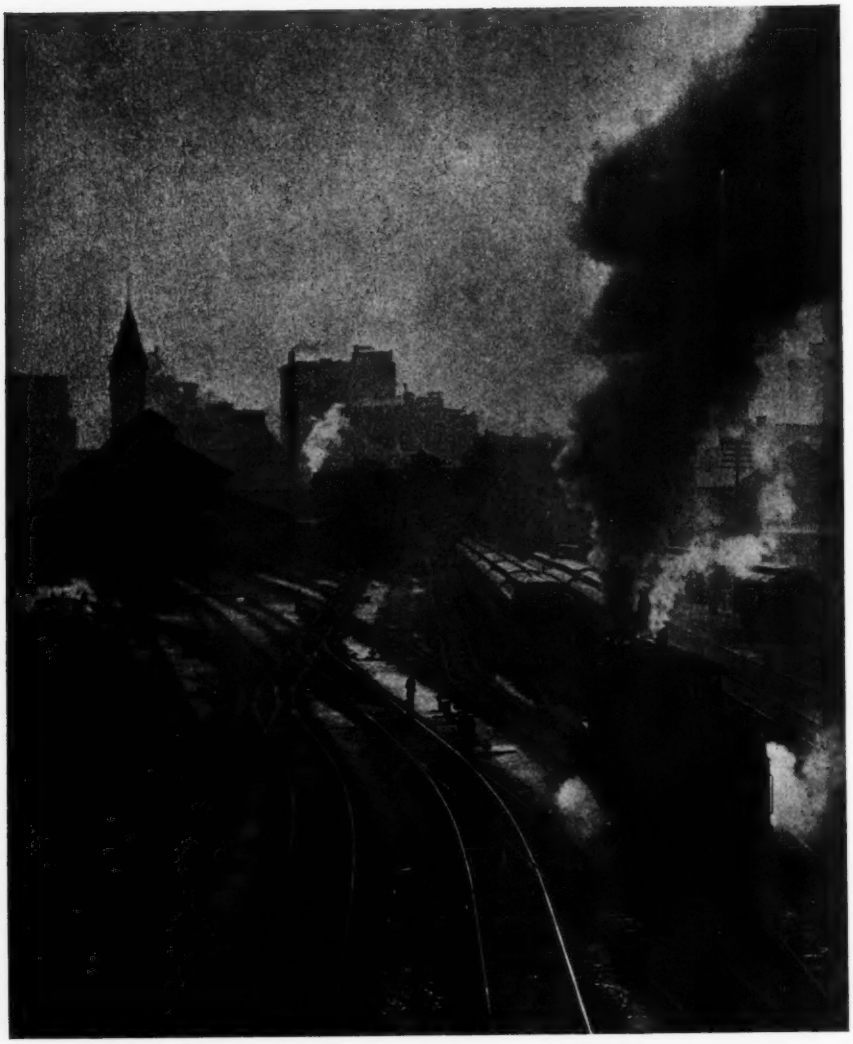
*Accommodation of the Eyes for Different Distances.*— If you hold your hand out at arm's length and look steadily at it, the pictures on the wall behind appear indistinct and doubled; but if you regard the pictures, the effect is reversed, and it is the hand that becomes indistinct. But when we walk about and use our eyes in the ordinary way we do not stare at one object or part of it with a fixed gaze; the eyes are constantly, though unconsciously, on the move, so that the whole scene appears in focus.

*Avoid Extremes.*— With the photographic lens you may have your focus too sharp, I admit, for you can get more detail than the keenest eye sees; but because this is so there is no need to fly to the other extreme. When one thinks of the beautiful things that the camera can show us it seems a pity to muddle them all away to a few shapeless blots.

*Effect of Excessive Diffusion.*— Too much diffusion eats away the edges of things, destroying the crispness; it is surprising how much this crispness (not hardness) of edge has to do with the apparent shape of objects. The fuzzy photograph always suggests bad drawing. The objects may be true in mass, but they do not reach out to their edges. All delicacy of contour is lost by this treatment.

Modeling and textures also suffer from undue fuzziness — and much of the pleasure of cultured sight is derived from these apparently small matters. For instance, a face or a limb, if the subtle modeling be lost, might as well be carved in wood. As for textures, if you destroy the texture of a tree, for example, away goes all feeling of leafiness, and there is only white, textureless cotton left.

*Essence of True Impressionistic Painting.*— The broadness of true impressionistic painting or of sketches is not the result of general softening, but of careful *analysis;* much is rejected, but the essentials are retained; the accent and firm drawing in places does not allow the spectator to miss the detail, for they suggest it to him. The sharper touches in the trees of Corot turn what would otherwise be a mass of soft paint into foliage; they are so cunningly disposed that the eye fills in the rest. But setting aside all skill and knowledge, this demands a process that allows of lightening or darkening, softening or hardening, at will, any portion, however large or small, of the picture.



D. H. BROOKINS
TRANSPORT OF MAN
THIRD AMERICAN PHOTOGRAPHIC SALON

*Fuzziness.*— The effect of diffusion is to generalize rather than to simplify. A painting or drawing is bad, however clever its sketchiness may appear, if it does not satisfy us with suggestions. We must be able to look at it and require no more; it should be a matter of surprise that so few touches mean so much. Apply the same test to some of the clever photographs that are about — for one should never be afraid of cleverness — see whether they are really simple or merely bare, mysterious or only obscure. Could you imagine yourself walking through them if they are landscapes, floating on them if they are sea-pieces, or shaking them by the hand if portraits?

Fuzziness interferes with values, contrast is lost, strength and attack are smoothed out of everything and the picture becomes tame and uninteresting. The reduction of Nature down to a few tones is a color-process; here and there some artist successfully does it — Whistler for instance — but it is a method that is spoiling many painters, as well as photographers, to-day.

*Art and Fashion.*— Art is terribly subject to fashion; we follow one another blindly; now it is considered correct to do one thing, but to-morrow it may be another. I am afraid that man — I do not mean the human race, but mere male man — cannot give a better reason for the things he does, at any rate in art, than the ladies can who must needs wear a certain shaped hat; but on a day, not to be distinguished from all the other days that have gone before it, this kind of hat no longer satisfies and another takes its place. And so — but I must pause, for I am fast getting out of my depth.

I think that fuzziness is a fashion — I hope a passing one. Much of it is the result of the superficial study of certain painters. Composition, arrangement and pictorial ideas may be gained from paintings, but it is a fatal mistake to attempt to copy the methods, traditions and faults even of painters. A photograph should be a photograph, and not an imitation of something else; when well executed it possesses a spontaneity and freshness that give it a charm and a place of its own in the world of art.

*Legitimate Use of Diffusion.*— I have ventured to give, at some length, my ideas regarding fuzziness, or the misuse of diffusion; but there are subjects and effects where I am ready to grant that softness is a gain. It would be difficult to say just when and where this may be, without illustrations. I have noted, from time to time, excellent examples in these pages; an interesting one was the frontispiece to this new series; viz., a view of Dordrecht, a town whose every association is connected with the old quiet days of the past, is seen across a stretch of placid waters. A gentle, quiet effect pervades the picture, but there is enough firmness to give reality. I instance this as a case of an effect suitable to a certain subject, but I do not regard it as a method suitable to every subject; some things are beautiful because of their detail, and require sharp, clear lighting; why be afraid to give this? On the other hand, where diffusion is good, make use of it, but only in such a manner that we do not have to rub our eyes when we look at pictures, and wonder whether we really ought to pay a visit to the oculist. — *The Practical and Pictorial Photographer, London.*

# ECONOMY IN BROMIDE AND GASLIGHT PRINTING

REV. CANON A. E. BLOXSOME DAY

IT is said of a certain manufacturer of a well-known mustard that he made his fortune not out of the amount that people ate, but from what they left on their plates and threw away. I suspect that much the same thing holds good in the case of the manufacturer of photographic materials, and that there are few amateurs who in the course of their photographic experience have not sadly reflected upon the amount of money which they have wasted in plates and paper, which, had they been a little more careful or a little more skilful, might have been saved for future use.

The object of this article is to show how waste in the most popular winter printing-processes may be cut down to an almost negligible quantity. Almost all the handbooks and most of the instructions given with regard to bromide and gaslight papers deal chiefly with formulæ for good developers, directions as to the light to be used and the correct distance of light from printing-frame and modifications in the strength of developer according as contrast or softness is aimed at. But they do not tell us what to do when we have not quite hit the right exposure, or when the print has unaccountably darkened in the fixing-solution, or suddenly manifested mysterious mottlings and markings that were not there when we took the print out of the developer.

The photographic expert or the trade demonstrator may tell us that these may easily be avoided by using their particular preparations at so much per bottle, or their firm's papers; but we may not be inclined to restrict ourselves to one particular brand, or to pay about one hundred per cent more for our photographic chemicals merely because they are ready made up and labeled "Bromox" than if we took the trouble to make them up for ourselves. Besides, at the end of it all we shall probably find that some of our results, even with all these refinements, do not come up to the standard we had been led to expect, and the photographic bill has but been lengthened to something more. Let the worker use whatever paper suits him best, and the same with the developer.

Personally I prefer amidol, as I think it gives finer blacks than any other, the formula for gaslight papers being:

| | |
|---|---|
| Sodium sulphite | 500 grains |
| Potassium bromide | 2 " |
| Water | 10 ounces |
| Amidol | 50 grains |

As the developer does not keep, it may be advisable to halve these quantities. It should be made up not more than an hour or two before use. The same formula acts excellently for bromide paper when diluted with half as much water again, a few drops of ten per cent solution of potassium bromide being added. Some short time ago, having seen in the photographic press a formula for the prevention of abrasion-marks, and having some glossy prints to make, I was tempted to abandon my favorite amidol and to try M. Q., with ten grains of

KATHERINE BINGHAM
RESPONSIBILITY
THIRD AMERICAN PHOTOGRAPHIC SALON

potassium iodide added to each ounce of stock solution, as recommended. The results were not at all satisfactory. I still thought there must be something in the idea, and bethought me of a formula which has been given for producing bright prints on bromide paper from very weak negatives. It consists of giving the full exposure as if printing from a normal negative, then developing up the image fully, without taking any heed to the high-lights darkening, and, after fixing and thorough washing, immersing the print in the following:

| | |
|---|---|
| Potassium iodide | 30 grains |
| Water | 10 ounces |
| Iodine | 3 grains |

until the high-lights turn blue, and then transferring it straight to a *clean* fixing-bath for five minutes.

Having some overprinted gaslight prints, I made up the solution and tried it upon them. The result showed not only a tremendous improvement in the prints, but also that any development-marks were cleared off, though, of course, the reduction was very great. I then tried the solution upon a print of a group in which an ugly background was prominent, and by alternate mopping with swabs of cotton — one charged with the solution and the other dipped in water — and an after-transference to the hypo-bath, I found that it was possible to obtain a nicely vignetted group with the background merging into clear white.

My next experiment was to dilute the iodide bath with three times its bulk of water, and to place some correctly exposed and developed prints (both gaslight and bromide) in this dilute solution; and I was gratified to find that there was no reducing-action if the prints were not left in the bath for more than a minute, and then transferred to the hypo, but that they were beautifully cleared of all abrasion and development marks, and when thoroughly washed and dried were more sparkling than others which had not been through the process.

I am sure that any one who tries the method will be delighted with the result, and will find that he can by this simple means save and improve many a print which otherwise he would have thrown away as too dark or flat, or as hopelessly spoilt by unsightly surface marks. Thus he will effect an enormous economy in printing-papers, for so long as he does not under-expose his prints, but errs by preference on the side of over-exposure, he need never waste a single print. One which looks hopelessly dark and foggy will come out clear and bright from the strong solution. Another, which is all his fastidiousness requires but for surface blemishes, will in the weak bath amply repay him for the extra trouble.

I am certain that the way to use iodide is by an after-treatment of the print in this direction, and if some one can simplify the method still further — though it is simple enough as it stands — he will earn the gratitude of many an ardent user of bromide papers, whose ardor is sometimes checked by the depth of his pocket. A final advantage of the process is that it can hardly have any deleterious effect on the keeping-qualities of the print, as the ingredients of the solution have been proved by Mr. Blake Smith, in his book on toning bromides, to be the safest to use for bleaching bromides preparatory to toning.— *Photography, London.*

F. S. PIPER SHAKER GLEN

## A MOUNTAIN BROOK

WILDIE THAYER

DEAR little brook, with laughter gay,
Your secret tell to me;
How go you ever on your way,
So happy, bright and free?
Rough is the path you journey through;
Yet, trusting without fear,
Forever you your course pursue,
All sweet and cool and clear.

"With joy and trust," the brook replied,
"I sparkle on my way;
For, far up on the mountain-side
I'm born anew each day.
So ever merrily I go;
A happy brook am I,
For He who called me forth, I know,
Will all my needs supply."

# EDITORIAL DEPARTMENT

## THE NEW RÉGIME

WITH the present issue this magazine begins a new epoch, which, we confidently anticipate, will prove a source of satisfaction to its many readers and advertisers. It will be the policy of the present publisher to maintain, and to improve so far as he can, the standard of PHOTO-ERA, as a high-class medium of photography, which, from a literary, scientific and artistic standpoint, has won for the magazine the confidence, admiration and support of thousands of workers in this country and abroad. The new PHOTO-ERA will continue to treat photography as an original art and, while recognizing the claims to distinction of the various schools and individual workers, will exercise a broad and generous spirit towards all, encouraging the beginner, as well as any deserving worker struggling for recognition.

Of equal, if not greater, importance are the obligations, pecuniary or otherwise, which a publication of the character of PHOTO-ERA assumes. The old PHOTO-ERA Company has ceased to do business, and the new management assumes all unexpired subscriptions and advertising-contracts for PHOTO-ERA. The sale of photographic specialties will be discontinued. It is not the province of a well-conducted magazine to compete with its advertisers in this respect. We believe, however, that it is not prejudicial to the interests of a photographic journal to offer, occasionally, a valuable piece of apparatus as a prize for artistic excellence in photography. Barring unavoidable accidents, PHOTO-ERA will appear regularly, and subscribers should receive their copies not later than the first of each month. In spite of the delays and other annoyances incident to a change of proprietors, PHOTO-ERA has appeared each month in its usual, attractive form, and, a pleasure to relate, it has also enjoyed the loyal support of its subscribers and advertisers. We chronicle this circumstance with an expression of sincere gratitude, and shall endeavor to merit a continuance of this friendly and generous spirit.

## THE DEALERS' MISTAKE

THE sale of stale or spoiled photographic goods, by dealers to practitioners, especially to inexperienced amateurs, is, to say the least, a short-sighted policy. That this is due to ignorance, rather than to design on the dealers' part, may be taken for granted. Still, this does not excuse the practice; for the results are obviously far-reaching. In the first place, it may mean the permanent loss of a customer. In the second place, it is a gross injustice to the manufacturer, who furnishes his agent with goods of undeniable excellence and good keeping-qualities. Besides, a continued run of bad luck, on the part of a new convert, is likely to cool his ardor, and, as has happened in one instance to our knowledge, cause him to abandon, once for all, his new

pastime. Having received intelligence of several complaints of the nature stated, we traced them to their source and found that the trouble lay with the dealer. In one instance — a case of fog — we learned that the stock of dry-plates was kept in the cellar, which was extremely damp; never otherwise! In another case the dealer usually displayed a large number of dry-plates in his shop-window, which faced the south. In the summer these highly-sensitive plates, exposed, as they had been, to the hot rays of the sun for days, if not weeks, doubtless caused the consumer endless disappointment. Little did these dealers heed the warning, legibly printed on each box, "Keep in a cool, dry place." Platinum and other sensitive papers, even dry-plates, are sometimes stored on shelves close to the wall near the chimney. During the summer months this does not affect the keeping-qualities of these goods; but in the winter it is fatal. There are dealers who, unacquainted with the nature of photographic merchandise, will store chemicals and sensitized papers close together, in one receptacle. Others, unaware that certain chemicals, kept in loosely-stoppered bottles, will undergo a radical change, unconsciously sell sodium sulphate for sodium sulphite. Do the manufacturers get a square deal in cases like these? Let the delinquent dealers take the lesson to heart and exercise more care in storing their photographic supplies.

## THE EVOLUTION OF THE "ARTIST-PHOTOGRAPHER"

OUR esteemed cotemporary, the editor of *Camera Craft*, has lost not a whit of his native humor on account of the terrible ordeal through which he passed as San Francisco was reduced to ruins. In the unavoidably-delayed December issue of his excellent magazine he entertains his readers with an assorted collection of hidden photographic journals, which he is pleased to call "Advertisements." Each magazine is humorously referred to by some of its failings — no photographic monthly has reached the state of absolute perfection — and, although the "pacific" editor has neglected to preface his gentle blows with an apology to his victims, we are sure that these, our brother editors, will have appreciated the humor thus conveyed and taken it with entire good nature.

This form of entertainment reminds us of a well-known American photographer, each successive step in whose career is characterized by a variation in his patronymic. The "artist-photographer's" evolution was effected as follows:

As retoucher at Potter's Photographic Studio, the dawn of his career, he figured as plain

HARRY SAUNDERS.

As assistant posing-artist in the same studio he was known as

HENRY F. SAUNDERS.

As chief posing-artist at the Van Rensselaer Studio he styled himself

H. FETHERINGTON SAUNDERS.

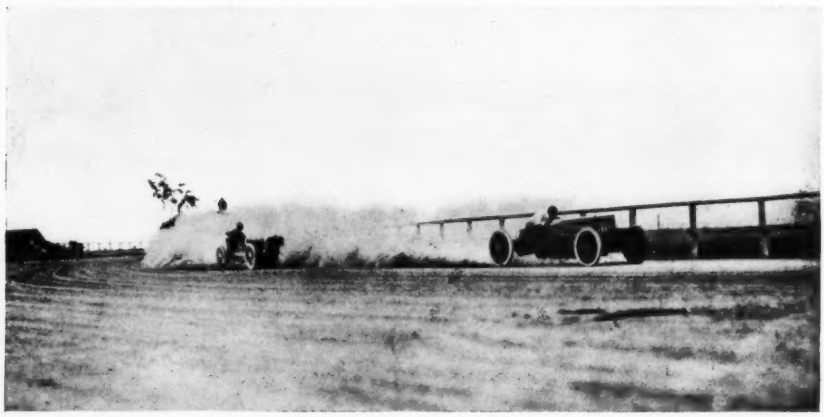
As proprietor of the Van Dyck Studio he stands forth as

HENRY FETHERINGTON SAUNDERS.

For the sake of propriety we have slightly disguised the name of the photographer. Who of our readers can discover his identity?

# THE ROUND ROBIN GUILD

*Conducted by Elizabeth Flint Wade. Specially designed for the amateur photographer and the beginner. Membership may be obtained by sending name and address to* PHOTO-ERA.



JNO. M. SCHRECK — FIRST PRIZE — HIGH-SPEED PHOTOGRAPHY

"The willow lifts a yellow haze
Of springing leaves to meet the sun,
While down their white-stone courses run
The swift, glad brooks, and sunshine weaves
A cloth of gold for cowslip leaves
Through all the field of April days."

The spring is in the air and in the blood. The cloud-shadows are chasing each other over the greening hills; tender leaves are bursting on tree and bush; the hedgerows are full of singing birds; and the woods are carpeted with the first frail blossoms of the year — beautiful because they are so fragile, because their day is so brief.

April days, when the tender haze of returning spring envelops the trees, are just the days for making charming pictures of wood interiors. If one goes to the woods to gather wild-flowers let him by all means take his camera and bring back some of the charming vistas which can be seen in the woods at only this time of year.

The brooks are brimming full of water, and sparkle, and foam and eddy as if they too had caught the spirit of spring. And they make such satisfactory subjects; for no wood-picture is quite complete without a glimpse of a happy brook traveling merrily through it.

The April days give one opportunities of securing "atmosphere" in one's out-of-door pictures, too; for there are no days in all the year quite like the April days, with their sudden showers of rain, their low-hanging mists, their fleecy, flying clouds; and atmosphere means much to the success of any picture.

April is here, and the wise amateur will make haste to catch the "uncertain glory of an April day" and embalm it on his gelatine plate.

## NOCTURNAL PHOTOGRAPHY

Some of our Guild members have not yet essayed making photographs out-of-doors at night, but they may be assured that they will find it very interesting and not at all difficult.

The pictures are all time-exposures, so a tripod is a very necessary adjunct to one's outfit. It should be attached to the camera before starting out, as it saves cold fingers on a wintry night, wet fingers on a rainy night and time and trouble any night. To keep the legs of the tripod from swinging out and making themselves a nuisance, a stout string should be wound around them several times, but not tied, and for convenience it should be permanently attached to one of the legs of the tripod.

A hand camera will be much more serviceable than a view camera, as, the light being dim, one must depend on the focusing-scale and one's ability to judge distances, rather than on any image thrown on the focusing-glass.

A bag with two pockets, and with a strap to throw over the shoulder, is the handiest affair for carrying the plate-holders, which are stored in one of the pockets and when used are transferred to the other. A box of wax matches that will light in the wind, or a small bull's-eye lantern, should form part of the outfit. Everything should be in the most convenient shape possible, as one does not find a piece of mislaid apparatus nor adjust the mechanism of a camera with any facility in the dark.

To make the most interesting nocturnal pictures one should choose either a night when snow is on the ground, or else a night when the streets are wet and the reflections of light on the pavements make interesting effects.

Non-halation plates are recommended for this sort of work, but experience has demonstrated that the ordinary plate answers quite as well, and the time of exposure is just half that required when the non-halation plate is used. The non-halation plates are perhaps preferable for a street brightly lighted with electricity, especially if lights are to be brought in rather close proximity to the camera. When lights come within the field of the lens halation will occur around them, but this does not detract from the picture, for a halo is always observable about a street-light on misty or rainy nights. If a very strong light comes near the camera and within the field of the lens, move the camera so as to bring a tree-trunk or some similar object between it and the camera, shutting out the direct light but not obstructing the view.

The time of exposure varies as in any other picture-taking, being governed by the light, the rapidity of the lens, and the rapidity of the plate. Three minutes on a brightly-lighted street is ample time, and even ten minutes does not seem to over-expose the plate. On a snowy night, or a rainy night when the pavements are wet and reflect the lights, an exposure of one minute will usually produce a good negative. If taken by moonlight, the exposure may be from fifteen minutes to half an hour, according to the brilliancy of the light and whether snow is on the ground or the contrary. Over-exposure is seldom to be feared.

One need not be disturbed by the passing of people or vehicles across the field of the lens, for they fail to make an impression on the plate. This is due to the long exposure and the insufficient lighting. A cab or carriage standing still during the exposure will be a part of the picture, and if far enough away from the camera the movement of the horses will not give a blurred image. A line of cabs drawn up before a brilliantly lighted building take well, and if between the camera and the light they will appear as silhouettes.

One of course understands that night pictures have not the distinctness and sharpness of a similar scene taken by daylight. They are suggestions or sketches, and their very indistinctness, "concealing yet revealing" the objects, is their greatest charm.

A scene in a park on the shore of a tiny lake where the lights are reflected in the water is a specially good subject for a nocturnal photograph. If there are rip-

ples on the water they flow uniformly or in rhythm, so do not make a series of blurs on the plate.

One should use the largest stop, as all the light possible must be admitted to the plate; and then one will not get the artistic effect if a small stop is used.

Rainy April nights are ideal nights for making out-of-door night pictures.

### HOW TO CULTIVATE ORIGINALITY

Creative genius keeps the world progressing in every department of industry, science, literature and art, yet we are so accustomed to these discoveries and inventions that we seldom give a thought to the brains that are constantly busy and the skilful fingers that are ever employed to produce this endless variety.

We all of us possess the faculty of invention in a greater or less degree; but unless used, it is like any unused sense, it lies dormant. The real difficulty in producing anything original is that it requires a great deal of thought, and the majority of people give very little time to serious thought on any subject — even less to originating anything.

We learn to think by studying the expressed thoughts of others, and we learn to invent or originate by studying what others have invented or originated.

Originality in a picture means the exemplifying of a thought or idea in a new way. The idea itself may not be new, but the manner in which it is pictured gives it a new meaning, and therefore it is called original.

One way to stimulate the imagination to compose original pictures is to select from an art catalogue several expressive titles and then try to imagine appropriate pictures for the titles. The name chosen becomes a nucleus around which the ideas gather, and it is surprising how the fancy begins to grow and take definite shape in the mind when it is given something on which to feed.

The facility and aptness by which ideas can be expressed by means of pictures make them a symbolic language easily understood. Pictures are used for many other purposes besides the illustrating of books and periodicals. Manufacturers use them to advertise and to call attention to their goods, the picture usually being some ingenious allusion to the article advertised.

Many of the pictures used in advertising are made from photographs instead of from drawings, and thus material for pictorial advertising opens a door into a lucrative occupation to the one who has wit enough to originate and skill enough with his camera to picture his idea.

Probably most of us have seen that clever picture advertising a certain brand of soap for washing woolens. The picture is of two youngsters, one wearing a garment washed in the soap that will not shrink the woolen, and the other wearing a garment that has shrunken to almost nothingness from being washed in poor soap. This picture was made from a photograph, and the artist said she made two dozen negatives before she succeeded in getting one that was satisfactory. She had the genius to originate the idea, the skill with her camera to illustrate it and the perseverance to keep trying until the result was successful. This picture was considered clever enough to be pirated by a London firm, who used it to advertise a brand of English soap.

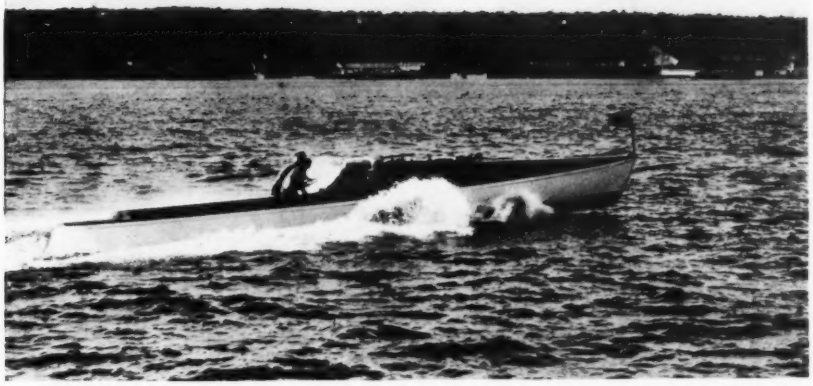
There is always a market for original ideas, and the more the inventive faculty is used the faster it grows.

Let the members of the Round Robin Guild set their wits at work, and perhaps some one of you may originate something that will be "an argument for a week, laughter for a month and a good jest forever after."

### THE USE OF THE SWING-BACK

The swing-back is an arrangement for adjusting the plate-holder at any desired angle in order to bring the object to be photographed parallel with the plate. Its design is to do away with distortion, especially in photographing buildings.

In arranging the camera for photographing a building it is often necessary to point the lens upward in order to include the top of the structure. In doing this the back of the camera is tilted at quite an angle, and if the plate is exposed when



H. H. RUSSELL — SECOND PRIZE — HIGH-SPEED PHOTOGRAPHY

the camera is in this position the resulting picture will be an example of what is known as "crazy architectural photography." The lines of the building, instead of being vertical, converge in such a way that the building appears narrower at the top than at the base. The swing-back obviates all this difficulty. When the front of the camera is raised, and the lens pointed upward, the screws of the swing-back are loosened and the back-board adjusted until it is in an exact horizontal position.

A little device to show whether the swing-back is horizontal is a small brass pointer fastened by a brass pin to the side of the swing-back so that it hangs loosely and will swing with the movement of the frame. A small pin or screw is set just below it, and when the swing-back is perfectly horizontal the end of the pointer will be on a line with the indicator below.

In taking pictures of high buildings the lens should be raised a little above the center of the plate. This is done by moving the rising and falling front. When the lens is raised it cuts off a portion of the foreground and saves tilting the camera as much as would be necessary if the lens was in the center of the plate.

### ROUND ROBIN GUILD COMPETITIONS

First prize: Value $10.00.
Second prize: Value $5.00.
Third prize: Value $2.50.

Prizes may be chosen by the winner, and will be awarded in photographic books or magazines published or advertised by us; in enlargements, art portfolios of photogravures, mounts or other photographic materials advertised by us, or, if preferred, we will send any article of a photographic or art nature which can be bought in Boston for the amount of the prize won.

### RULES

Membership in the Round Robin Guild, with all its benefits — among which the correspondence privilege probably stands first — is free to all, and we invite every photographer to become a member. Entrance in the monthly competitions is also free to all, whether subscribers to PHOTO-ERA or not.

### SUBJECTS FOR COMPETITION

March — "A Windy Day." Closes April 30.
April — "A Showery Day." Closes May 31.
May — "Nocturnal Photography." Closes June 30.

June — "Interiors, with Figures." Closes July 31.
July — "Landscapes." Closes August 31.
August — "Waterscapes." Closes September 30.
September — "Sunsets." Closes October 31.
October — "Windows and Doorways." Closes November 30.
November — "Genre Studies." Closes December 31.
December — "Home Portraiture." Closes January 31.

AWARDS — HIGH-SPEED PHOTOGRAPHY

First prize: Jno. M. Schreck.
Second prize: H. H. Russell.
Third prize: George R. Carter.
Honorable Mention: Lewis T. Emmert.

SENSITIZING PLATINUM PAPER

While most amateurs prefer to buy the platinum paper already sensitized there are some who like to experiment with the process of sensitizing. One of the simplest formulas, and one which, like the advertisements in florists' catalogues, is warranted to "come true from seed," is herewith given.

The paper is first salted and dried. One can buy the paper ready salted or salt it himself after formulæ already given in the Guild Department.

The sensitizing-solution is made up in two solutions.

*No. 1*

| | |
|---|---|
| Ferric oxalate | 1 ounce |
| Water (filtered) | 4 ounces |
| Oxalic acid | 32 grains |

*No. 2*

| | |
|---|---|
| Potassium chloro-platinite | ⅔ ounce |
| Water (filtered) | 4 ounces |

To sensitize, take three ounces of Solution No. 1, two and two-thirds ounces of No. 2, and add half an ounce of water to the solution. The mixture may be applied to the sheet with a wad of surgeon's cotton, or it may be poured into a tray and the paper floated on the surface for two minutes. Dry quickly in a dark room. The developing-solution is made of one hundred and thirty grains of oxalate of potash to one ounce of water.

Undoubtedly, the first trial at sensitizing the paper will not be successful. It requires practice to coat the paper evenly, but after two or three attempts the process becomes easy.

ANSWERS TO CORRESPONDENTS

EMIL S.— To remove the discoloration from your Velox prints, immerse them in a solution made of one-half ounce of sulphuric acid, one ounce of chrome alum and ten ounces of water. The prints must be washed well after immersion in this bath.

JEAN G. H.— Printing by diffused light means printing either in the shade or placing some transparent fabric between the negative and the direct rays of the sun. Most photographers use tissue-paper to cover the negative when the printing is done in sunlight. The kind called onion-skin paper is used, as this is free from flaws and of an even texture.

E. R. H.— The round, clear spots on your negatives, with sharp, dark edges, are caused by the formation of air-bubbles on the surface of the plate when the developer was turned over it. The plate should be slid quickly into the tray and rocked immediately to break the bubbles if any have formed.

H. KAHN.— Toning-baths for silver prints should be made up for at least an hour or two before using. This gives them a chance to ripen, and the toning will be more even and the color obtained much finer.

C. L. O.— The reason of your films sticking to the paper in drying is because they were the non-curling films and are coated with gelatine on both sides of the celluloid, though only one side is sensitized. To dry, pin them up by the corners to the edge of a shelf.

BERTHA B.— Use a soft pencil sharpened to a needle-point for touching out the freckles and lines on a portrait. The Kohinoor, 5 B's, is an excellent pencil for this work. If the film has not tooth enough, rub the places to be retouched with a little powdered pumice-stone. This will roughen the film just enough to make it take the pencil freely.

## A SULPHIDE TONING HINT

An able English worker has recently suggested a very satisfactory dodge in toning bromide prints, by means of which far more pleasing results may be obtained than the usual sepia tones, which are frequently somewhat cold in spite of their brown color. The prints should be bleached as usual, and then exposed for several minutes in sunlight, until they become of a grayish color. After this, they are toned as usual, the resulting tone being a beautiful, warm, chocolate brown.

## LANTERN-SLIDES BY THE CARBON PROCESS

A method of making transparencies and lantern-slides by the carbon process has been suggested by Dr. Hauberrisser in Eder's *Jahrbuck*, the advantages of which are that a tissue of any color may be used and that neither frilling or reticulation occur. Dr. Hauberrisser exposes the tissue under the negative in the ordinary manner, but for about double the usual time — harsh negatives even longer. It is then developed in the customary way on waxed transfer-paper, after which it is brought into contact with the gelatine of a fixed-out lantern-plate, as a final support. This last transfer should be made under water at about 75° Fahr. The tissue should then be gently squeegeed to the gelatine and the waxed paper stripped off.

## A CURE FOR HALATION

Immerse the negative in a solution made up as follows:

| | |
|---|---|
| Water | 5 ounces |
| Chromic acid | 15 grains |
| Potassium bromide | 30 " |

When bleached, redevelop with fresh developer until only the halated parts remain when looked at from the glass side. Finally, place in a strong hypo-bath, which will dissolve away this portion.

## REDUCTION OF GASLIGHT PRINTS

A good stainless reducer for Velox or Cyko prints may be made as follows:

| | |
|---|---|
| Potassium ferric oxalate | 20 grains |
| Sodium sulphite | 200 " |
| Water | 5 ounces |

Shake until dissolved, and then add:

| | |
|---|---|
| Oxalic acid | 75 grains |

Shake until the solution becomes a bright green in color, pour off any acid that is not dissolved, and add:

| | |
|---|---|
| Hypo | 2¼ ounces |
| Water to | 10 " |

With this reducer it matters not whether the print is free from hypo before its use. It may be used repeatedly, if kept in a dark place.

## GLYCIN FOR STAND DEVELOPMENT

Glycin is probably the most favored of the many developers for stand development, because it keeps especially well in solution, does not discolor or fog negatives, even when the time of development is long, gives an extra fine grain-character of deposit especially suitable for microscopic work or enlarging and yields bright, well-graduated negatives of good printing-color and quality.

Hueble's formula is as follows:

| | |
|---|---|
| Boiling water | 2 ounces |
| Sodium sulphite | 1½ " |

After this is dissolved, add:

| | |
|---|---|
| Glycin | ½ ounce |

And then, gradually,

| | |
|---|---|
| Potassium carbonate | 2½ ounces |

The thin cream thus formed keeps well in full, tightly-corked bottles. As a strong effervescence takes place when the potash is added, it should be done slowly and carefully, in a large dish.

For use take:

| | |
|---|---|
| Stock solution | 1 ounce |
| Water | 80 ounces |
| Potassium bromide | 8 grains |

With a solution of this strength the image will appear in from fifteen to thirty minutes, and development will be complete in several hours. This may be too slow to suit some workers, but a little experimenting with stronger solutions will readily determine just how the action may be completed in the desired length of time.

## INK-STAINS ON NEGATIVES

An accidental drop of ink on negatives is a frequent occurrence, but there is a remedy. Soak the negative in water just made acid with a little hydrochloric acid and rub the ink-spot gently with a saturated solution of salts of lemon. Another method is to soak first in an alum-bath and then rub the spot with a saturated solution of oxalic acid.

## PHOTOGRAPHING DOCUMENTS AND LINE DRAWINGS

The plates used are of the greatest importance, and should be of the slow process variety. Hydroquinone is the best developer, prepared as follows:

| | |
|---|---|
| Hydroquinone | 32 grains |
| Sodium sulphite | 320 " |
| Formaline | 40 " |
| Water | 4 ounces |

As long as the lines or letters show no sign of deposit development should be continued, but upon the first appearance of darkening, rinse and fix. If the whites are not dense enough in the negative they may be intensified by the usual methods.

## SIGNATURES

THERE is no necessity for signing a photograph at all, and the photographer has less excuse than the painter for inflicting his autograph on all who glance at his work. For the painter, at least, has his brush in hand as he gives the last touches to his work, and can put his initials or monogram unobtrusively into some corner of it; while the photographer, unless he is so incorrigible a faker as to paint on his print, has got to take pencil or brush and use a foreign medium to proclaim its authorship. Still, if he likes to do so, and will put his mark on the work so that it is not an eyesore, we have little to say against it; and it is only when the name is so prominent as to interfere with one's appreciation of the picture that bears it that we would protest.

A well-known worker, one of the worst offenders in this respect, proclaims his authorship in bright red letters on decidedly dark-toned prints. Many who put their names on their prints err from not knowing how best to do it. Lettering should neither be in white nor in black, nor in the full depth of the particular color of the print. The letters should match the print in color, of course, but should be put on with a brush containing such weak pigment that they are only a trifle darker than the particular tone which happens to form their ground. When this is so, the name will be there for reference, but unobtrusive, and in such a form little exception can be taken to it.— *Photography.*

## A PYRO-SODA DEVELOPER WHICH WILL KEEP

IT has ever been a problem to keep pyro in solution without deterioration. Both sulphurous and oxalic acid act to a certain extent as preservatives; but with either, the solution deteriorates more or less rapidly from the time it is made. B. J. Edwards, of Ealing, England, claims that a solution containing equal weights of pyro and sodium metabisulphite will keep in good condition for at least four years, and, he believes, indefinitely. Metabisulphite of sodium or potassium, for either acts equally well, would, therefore, seem to be the only perfect preservative of pyro. If the pyro is good and fresh, and the water has been distilled, the solution will be colorless and will remain so.

Mr. Edwards advises a two-solution formula, the alkaline portion being a fairly concentrated solution of both sulphite and carbonate of sodium. Particular attention should be given to the sulphite in order to make sure it is in good condition.

Mr. Edwards's formula follows:

*A*

| | | |
|---|---|---|
| Pyro | 1 | ounce |
| Sodium metabisulphite crystals | 1 | " |
| Distilled water, to | 80 | ounces |

*B*

| | | |
|---|---|---|
| Sodium sulphite crystals | 10 | ounces |
| Sodium carbonate crystals | 10 | " |
| Distilled water, to | 80 | " |

For uses, take equal parts of each. For ordinary work the developer may be used far stronger, but for portraits it works better at half strength. However, the worker can vary its strength to produce the required degree of density to suit his purposes. At 65° Fahr., development will be complete in five or six minutes. Potassium bromide may be added in the form of a ten per cent solution, if needed, and it will increase contrast without materially lengthening the time of development. The negatives are neutral black without stain, and the solution may be used for several plates if developed in succession.

## DRYING CARBON TISSUE

CONTRARY to the belief of many workers in carbon, it is not necessary after sensitizing the tissue to dry it in the dark or even in a dull light. It may be squeegeed to a ferrotype plate and allowed to remain on it to dry in an ordinary room without the slightest danger. Tissue so treated has a beautiful glossy surface which gives perfect contact with the negative.

## METOL DEVELOPER FOR PORTRAITURE

A GOOD one-solution metol formula producing negatives suitable for portrait-work may be made as follows:

| | | |
|---|---|---|
| Water | 20 | ounces |
| Metol | 160 | grains |

When dissolved, add:

| | | |
|---|---|---|
| Sodium sulphite | 3½ | ounces |
| Potassium bromide | 22 | grains |
| Potassium carbonate | 1¾ | ounces |

For use, take one part developer to three parts water.

## REMOVING FERRICYANIDE STAINS

FREQUENTLY negatives become stained from careless use of the solution of potassium ferricyanide in Farmer's reducer, and it becomes desirable to remove them. This may be done by immersing the negative in a weak solution of ammonium sulphocyanide, about five grains of the salt to each ounce of water.

## OINTMENT FOR METOL-POISONING

SOME persons are seriously affected by this developer, while others experience no inconvenience whatever in using it. If the hands become sore, with itching, inflammation, swelling, or peeling off of dry skin, metol should be discontinued and another agent used instead. The following ointment will be beneficial:

| | | |
|---|---|---|
| Ichthyol | 1 | part |
| Lanoline | 2 | parts |
| Vaseline | 3 | " |
| Boracic acid | 4 | " |

## EIKONOGEN FOR PORTRAITURE

EIKONOGEN, one of the so-called soft-working developers, because it tends to produce negatives free from excessive contrasts, is exceptionally fine for portraiture. A satisfactory formula is as follows:

*A*

| | | |
|---|---|---|
| Sodium sulphite | 350 | grains |
| Eikonogen | 110 | " |
| Water | 10 | ounces |

*B*

| | | |
|---|---|---|
| Potassium carbonate | 300 | grains |
| Water | 10 | ounces |

Use equal parts of A and B for ordinary development. Eikonogen is excellent for stand-development, for which purpose it should be diluted with from six to ten times its volume of water, according to the rapidity with which it is desired that development should take place.

## HOW TO DEVELOP MOONLIGHT EFFECTS

By "moonlight" effects, in this connection, are meant views including clouds slightly obscuring the sun. It will be seen, therefore, that a somewhat thin negative having a fair amount of detail and density in the high-lights and but little in the shadows is required. To produce this result, commence development in a normal solution containing two or three grains of potassium bromide to the ounce of developer. This brings up the extreme high-lights before producing detail. When this is accomplished, transfer the plate to another tray containing normal developer diluted with twice its volume of water and containing no bromide. This solution will bring out as much detail as desired, but too much will ruin the moonlight effect.

## USING STALE PLATES

*Photographische Welt* recently stated that plates that have been allowed to deteriorate by long keeping, and show marginal fog, are not utterly ruined, but may be used provided a long exposure is given and considerable soluble bromide is placed in the developer. This idea is not new, although it may be to some of our readers.

## BROAD EFFECTS BY RETOUCHING

Very pleasing broad effects in printing may be obtained by covering the glass side of a negative with tissue-paper and working upon it with lead-pencils. In order that the tissue-paper may dry perfectly flat, it should be placed between two pieces of damp blotting-paper until it becomes somewhat limp. Place the moist tissue — a trifle larger over than the negative — on a sheet of clean paper, lay the negative on it, glass side down, apply a narrow line of paste around the edges of the film side and turn the edges of the tissue up on to the paste, laying a sheet of paper above all while rubbing into contact with the fingers. When dry, the tissue will be tightly stretched and may be worked upon with soft pencils and leather stumps, the more transparent parts being secured by applying with a sable brush a solution composed of one part Canada balsam to two parts turpentine. Very original, sketchy and artistic results may be obtained in this way. If desired, ground-glass varnish may be used instead of tissue-paper.

## SOFT RESULTS FROM CONTRASTY SUBJECTS

Just what course to pursue when extreme contrasts present themselves, such as a woman's white dress against a man's dark clothes in a group portrait, is a frequent problem to the average amateur. Although different opinions prevail regarding the treatment of such subjects, probably the best method is to give a long enough exposure for the dark material, and develop in a very dilute solution, which will bring out all possible detail before much density has been obtained. This method will produce a flat negative without much contrast. If more accentuated high-lights are thought advisable, the plate may be placed for a brief period only in a normal developer, considerably restrained with potassium bromide. Longer immersion in this solution will cause chalkiness. Halation must be avoided in this work, and a backed plate should be used.

## CHANGING P. O. P. INTO GASLIGHT PAPER

When the amateur photographer has only some P. O. P. and wishes to make a few prints in the evening, it is an easy matter to change it into the gaslight variety by converting the soluble silver salts into a mixture of silver haloids having a predominance of silver bromide. To accomplish this, float the paper for five minutes on the ordinary ten per cent solution of potassium bromide diluted with twice its volume of water, wash for the same length of time and dry. This latter operation requires only a few moments and may be greatly hastened by pressure between hot photographic blotting-papers. Since there is no soluble silver salt to stain the negative, the paper need not be perfectly dry. Paper so treated is not as sensitive as the ordinary bromide paper, but yields very good results.

## THE EFFECT OF VARYING PROPORTIONS OF THE MOUNT

A truth which should have increased attention at the hands of photographers in general is that the proportions of length and breadth of the mount affect the apparent length and breadth of the print. Increasing the size of the mount diminishes the apparent size of the print. If the space at each end of the print is increased, the print itself looks smaller, but the horizontal proportions are apparently lengthened. Making the end spaces of the mount narrower than those at the top and bottom increases the apparent vertical dimensions and makes the print look more nearly square. It is seldom pleasing to have both print and mount of the same proportion, as it brings four corner points in a straight line. For the average print a much more pleasing arrangement is to have the mount space at the bottom a little wider than at the top, and the spaces at the ends a little wider than at the bottom.

# NOTES AND NEWS

## PHOTOGRAPHERS' ASSOCIATION OF ILLINOIS

THE Ninth Annual Meeting of the Executive Board of the Photographers' Association of Illinois, at Paxton, Ill., Feb. 4, 1907, was called to order by President S. W. Stout.

The resignation of H. C. Lines as Secretary of the Association was received and, upon motion, duly seconded and carried, was accepted.

The President announced that he had appointed, subject to the approval of the Board, W. A. Graber, of the Walinger Company Studio, Chicago, as Secretary.

Upon motion by Mr. Mann, Treasurer, seconded by Mr. Jay, the appointment was confirmed.

The President then read the resignation of Mr. W. M. Henshal as First Vice-President, and, upon motion, duly seconded and carried, it was accepted.

It was then moved and seconded that Mr. Chas. E. Jay be advanced from Second Vice-President to fill the place of First Vice-President, and that Mr. H. B. Medlar, of Woodstock, Ill., be appointed Second Vice-President to fill out the unexpired term. The motion was carried.

The regular business of the meeting was then taken up. After several lengthy discussions regarding the aims and advantages of the photographic convention, it was decided unanimously that the Ninth Annual Convention of the Photographers' Association of Illinois be one of education.

The Secretary was instructed to procure the best talent that the country afforded for a series of lectures to be given during the Convention, aiming to teach those attending not only everything new regarding the business, but also how to make more dollars out of the old business.

A lengthy program, which will be announced later, was then arranged.

A larger number of prizes for exhibits was provided for. A list of these will also be announced later.

The Convention will be held at the Palmer House, Chicago, May 6, 7, 8 and 9, 1907.

All communications regarding space for displays, space for advertising and any other information should be directed to W. A. Graber, Secretary, care The Walinger Co. Studio, 156 Wabash Ave., Chicago, Ill.

## RAPID PLATES OF FINE GRAIN

EVERY advance in the speed of plates is of distinct advantage to the photographer, but when increased speed is also accompanied by increase in the fineness of grain, the advantage is many times greater, because finer grain means better detail, value and gradation in both high-lights and shadows. It means better negatives every time. If this is so, don't fail to read the advertisement of the Hammer Dry-Plate Company in this issue.

## PHOTO-SECESSION

A DISTINCTIVE and characteristic exhibition of photographs by Miss Alice Boughton, of New York; Mr. William B. Dyer, of Chicago; and Mr. C. Yarnall Abbott, of Philadelphia, was held at the Little Galleries of the Photo-Secession, 291 Fifth Ave., New York City, from February 19 to March 5.

## WISCONSIN CAMERA CLUB

THE monthly program of the Wisconsin Camera Club, recently received, showed an especially interesting series of meetings for March. Chief among these was the first meeting of the month, devoted to a talk on composition by Prof. Alexander Mueller. It was the second of a series of five lessons, an interesting and instructive feature of each being the criticism of prints brought by members of the club. The second and third weekly meetings were given up respectively to lantern-slides from Graflex negatives and a demonstration of printing-out papers by Mr. J. A. Hood. The meeting of March 26 marked the opening of the Third American Photographic Salon at the clubrooms, where it will be accessible to the public until April 5, from 10 A.M. until 9 P.M., daily. The club also announces the close of its General Print Contest on May 6.

## BISSELL COLLEGE OF PHOTO-ENGRAVING

WE have just received from the above-named institution its comprehensive and attractively printed sixty-four page prospectus for 1907. This interesting volume gives the prospective student some idea of the unequalled facilities for a thorough course which are afforded at the Bissell College. Everything which modern invention and money can secure has at this institution been placed in the hands of practical instructors of national reputation, to make easy the professional career of graduates. It is probable that no other school of its kind in the world places its pupils before the public under such favorable auspices. Any one considering the study of photo-engraving will find it to his advantage to send to Effingham, Ill., for a copy of this prospectus.

## ANNOUNCEMENT

THE successful article on "Some Historic Landmark of National Interest" of our literary prize contest, which closed Sept. 1, 1906, is from the pen of Mr. H. Prentiss Parker, of Boston, Mass., and not of Mr. F. A. Fairbanks, as announced erroneously in the February issue of PHOTO-ERA. Mr. Parker, on account of his personal acquaintance with many of the old Boston families, has had exceptional facilities for gathering data regarding the historic mansions of Boston and vicinity, and is generally regarded as an authority on this interesting subject.

# Bausch & Lomb-Zeiss TESSAR

PHOTOGRAPHED BY B. L. MONTANYE WITH TESSAR

## In Every Land

under all kinds of conditions, with every variety of subject that the photographer encounters, whether he be photographing for pleasure or for profit, it pays to have your camera equipped with

## TESSAR

lenses. You will be sure of those most valued pictures that are most apt to be failures unless the lens has the speed and fine optical qualities of TESSAR. Ask the dealer to show you Kodaks, Premos, Centuries, Hawkeyes, Graflex, and other cameras with TESSAR Lenses.

**Bausch & Lomb Optical Company**
**Rochester, N. Y.**

New York Boston Washington Chicago San Francisco

## The Street of "WHY?" Leads to the "HOUSE OF KNOWLEDGE"

Why are MORE CRAMER PLATES USED to-day THAN EVER before?
Why do the MAJORITY of Prize Winners USE CRAMER PLATES?
Why do YOUR NEIGHBORS USE CRAMER PLATES?

*ASK THEM*

**G. CRAMER DRY PLATE COMPANY**

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**SEMON BACHE & CO.**
**West & Hubert Sts., NEW YORK**

**GLASS**

For Photographic and Kindred Purposes

**Dry-Plate Glass**
**Lantern-Slide and Cover Glass**
**Fine Ground-Glass**
**Colored Glass** — Flat or Bent—For all Purposes
**Stereopticon-Lenses**
**Mirrors** — All Thicknesses and Qualities
**High-Grade Picture-Glass, Etc., Etc.**

We are trying to give an illustration of the nature of our business, which includes every variety of glass up to the point where it ceases to be a commercial and becomes a scientific and technical proposition.

*Correspondence invited*

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**HOTEL TOURAINE**

Delaware Ave. and Johnson Park

BUFFALO, N. Y.

A modern, high-class and convenient stopping-place, offering every accommodation for the comfort and pleasure of transient guests. 250 rooms with baths. Service, a la carte, table d'hote. Music every evening.

C. N. OWEN, Proprietor

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**WOLLENSAK**

The name **"Wollensak"** on any photographic lens or shutter is a guarantee of its excellence, for all **"Wollensak"** products are sold under our positive guarantee to refund the purchase price if not satisfactory.

Our line includes the Royal Anastigmats, Royal Anastigmat Wide Angle, Royal Portraits, Series A Portraits, Rapid Symmetrical, Rapid Rectilinear and Symmetrical Wide Angle, our "Junior," "Senior," "Winner," "Automatic" shutters, and "Regular" shutters, the "Sky Shade" and "Stereoscopic" shutter and our new Studio Shutter a most complete and practical line.

All these are described in our catalog, a copy of which will be sent free on request.

**Wollensak Optical Co.,**
**290 Central Avenue, Rochester, N. Y.**

# NOTES AND NEWS

## PHOTOGRAPHERS' ASSOCIATION OF PENNSYLVANIA

THE Eleventh Annual Convention of the Photographers' Association of Pennsylvania, including West Virginia, Maryland, Delaware and the District of Columbia, will convene in Williamsport, Penn., April 23, 24 and 25.

It has been the aim of the Executive Board to have an instructive and business convention.

An important feature at this meeting will be a school of photography, conducted by the American Aristotype Co., of Jamestown, N. Y. They will have experts in all branches to demonstrate and explain the latest and best methods of producing the finest kind of fine art photographs.

No photographer within this territory can afford to miss such an opportunity of seeing photographs produced, from the making of the negative to the finished print, by the most modern and up-to-date methods.

The afternoons and evenings will be given to the school of photography, the mornings being taken up by business sessions in which talks and lectures by some of the leading members of the profession will be of practical benefit to all.

The convention is to be held at the Park Hotel, an establishment large enough to accommodate all who may attend, and not only affording spacious parlor and ballroom privileges for the entertainment of guests, but also providing a splendid exhibit-hall for the prize photographs. Full particulars regarding the prize-list, which should interest every member of the Association, may be had upon application to the Secretary, E. E. Seavy, New Castle, Penn.

## INDIANA ASSOCIATION OF PHOTOGRAPHERS

THE Executive Board of the Indiana Association of Photographers, in connection with the Trustees of the Daguerre Memorial Institute, met at the Denison Hotel, Indianapolis, Jan. 22, 1907, at 10 A.M., all members being present, as follows: W. E. Vilmer, President; Chas. W. Neiswanger, First Vice-President; H. E. Koch, Second Vice-President; J. O. Cammack, Treasurer; J. Frank Cady, Secretary; George J. Parrot, Chas. W. Neiswanger, Geo. Graham Holloway, Trustees.

Former Treasurer Geo. W. Smith was also present, whose books were audited, and committee reported them as correct, and same were turned over to Treasurer-elect J. O. Cammack.

The next convention is to be held at Winona Lake, July 8, 9, 10, 11 and 12. Its features will be of an educational and business nature, and men of the highest ability are being secured to coöperate with the able instructor Mr. W. S. Lively in making the program a profound success. Good music and splendid entertainment may be expected, and the prize offers are also worthy of notice. These may be had of the Secretary, J. Frank Cady, Boonville, Ind.

## THE WYNNE INFALLIBLE EXPOSURE METER

IT is with pleasure that the editors commend to the attention of the readers of PHOTO-ERA the Wynne Infallible Exposure Meter, advertised elsewhere in these pages. It is a neat little vest-pocket instrument for finding the absolutely correct exposure under all conditions. For a number of years past we have had frequent occasion to make use of the Wynne meter to ascertain exposures difficult to determine from observation, and have always found it "an unerring guide to the correct exposure required for every speed of plate, on every kind of subject and under every condition of light." We unhesitatingly recommend this instrument as an important and necessary part of every serious photographer's outfit. Without it, no worker's equipment is complete.

## THE AUTOMOBILE — ITS CARE AND MANAGEMENT

IT only remains to sweep away a few popular misconceptions to completely establish the automobile as the latest mechanical advance of civilization, family convenience and pleasure-maker. With laws directed by a strong public sentiment against speed-madness, a dozen machines will be used where now is one. An ordinary runabout is a far safer vehicle for a woman's management than a horse vehicle. The new alcohol fuel will eradicate the foul stenches which have hitherto sadly hurt the sport.

A knowledge of the mechanical principles which govern motor vehicles may easily be obtained from "Homan's Automobile Educator" (Theo. Endel & Co., New York City). In this book, which is admirably and profusely illustrated, the subject is carefully and substantially set forth in a manner which robs it wholly of the terror of technicalities.

## A. K. BOURSAULT

THE numerous friends of Mr. A. K. Boursault, formerly advertising-manager of the C. P. Goerz American Optical Company, are hereby informed that he now acts in that capacity, in addition to that of business manager, for the *Paris Modes* magazine. We are sure that all who have come in touch with this honest, genial and painstaking gentleman will wish him well in his new position.

## RALPH J. GOLSEN SUPPLY COMPANY

THE well-known photographic stock house of Ralph J. Golsen, Chicago, announces its incorporation as the Ralph J. Golsen Supply Company, with new quarters at 58 and 60 Wabash Avenue, where a complete line of photographic material, apparatus and lenses of every description will be constantly kept in stock. The new Monster Bargain List of this firm should be in the hands of every photographer.

# NOTES AND NEWS

## PRIZES FOR PHOTOGRAPHS THAT PLEASE ADVERTISERS

Of the photographic contests which *Leslie's Weekly* is constantly conducting, one of the most interesting relates to the use of photographs for advertising. The paper has frequent calls for attractive photographs for use in artistic advertisements. For example, it has just supplied a design for the advertisement, in the pages of *Leslie's Weekly*, of a famous breakfast food; and others are sought for autos, popular beverages, hotels, steamship and railroad lines, etc.

To encourage photographers to turn their attention to such subjects, *Leslie's Weekly* makes this prize offer:

For the best photograph suitable for use as an advertisement (preferably for one of the advertisements now running in *Leslie's Weekly*, though other advertising subjects are not barred) we will give a prize of $10; for the second, a prize of $5; those photographs receiving honorable mention will be purchased. The composition of such photographs should be simple; the picture should tell its own story, or, at least, suggest it with very little help from the title which accompanies it. The photographer is expected, however, to attach to each print which he submits (any number may be entered for the competition) such a title, together with the name of the article, business, etc., which the picture is intended to advertise. No copyright photographs can be received.

The competition will be closed on May 15.

Address all contributions in this contest to The Editor, Advertising Photographic Contest, *Leslie's Weekly*, 225 Fourth Avenue, New York City.

## BOOK REVIEWS

Little Pilgrimages among Bavarian Inns. By F. R. Fraprie. L. C. Page & Co., Boston. 8vo., $2.00

Under this alluring title the author describes a series of excursions made on foot, by carriage and by train, from the city of Munich, into one of the most romantic parts of Central Europe — the Bavarian Highlands. The scenery here is second only to that of Switzerland, and affords ample opportunities for pen and camera, and Mr. Fraprie has made good use of both. He chronicles his impressions with graphic skill, and with infectious enthusiasm portrays the beauty of those remarkable lakes of Southern Bavaria. Incidentally, the reader is treated to an insight into German peasant-life with its quaint and simple customs. These pilgrimages are extended northward to Augsburg, Nuremburg and Rothenburg, those rare, mediæval towns whose picturesque, architectural features the camera never tires of picturing. Oberammergau, of passion-play fame, is also visited, as well as the neighboring castles of fairylike splendor built by Ludwig II. A number of excellent photographs, apparently by the author, add greatly to the interest of the volume.

Natural-Color Photography, by Dr. E. König; translated from the German with additions, original tests and experiments by E. J. Wall, F. R. P. S. Dawbarn & Ward, London.

Although the principles underlying color photography have been known for more than a quarter of a century, no actually new discoveries have been made for a number of years. The intense interest manifested in this subject to-day by prominent photographers throughout the world is due not to the discovery of a new method, but to improvements in the processes already known. So far-reaching are these innovations that no insurmountable difficulties now stand in the way of natural-color photography. Probably the greatest progress has been made in the finding of new sensitizers, the preparation of light-filters, and, above all, the publication of accurate formulæ for making them.

Thus it may be seen that the second edition of Dr. König's book, translated by Mr. Wall, appears at an opportune time and fills the need of a practical manual for the several color-processes that can be employed by amateurs and others. Photo-mechanical processes are not included, as they necessitate the use of machinery and material which is seldom a part of the equipment of an average photographer. The work is intended as a practical text-book, and for this reason all matters relating to the history of color-photography has been wisely omitted.

Both the direct and indirect methods are taken up — the former briefly, however, as they have but little practical value. As to the larger portion of the book, devoted to the indirect processes, both subtractive and additive, it is probable that no clearer, more concise or practical manual of these methods exists in the English language.

## LANTERN-SLIDE MAKING

The lantern-slide season is still with us, and it is very natural, therefore, that the photographic worker should take up printing from negatives developed during the vacation season, and making lantern-slides. We would call the attention of readers who are interested in this work to one of the most practical, as well as the most popular numbers of THE PRACTICAL PHOTOGRAPHER SERIES, "Lantern-Slide Making." This very handy little volume tells, in an interesting way, what a good slide should be, and how it may be obtained. From a suggestion of the kind of negatives required, the reader is taken through the various stages, such as exposure, printing optically and by contact, development, clearing, intensification and reduction, drying, masking, binding, spotting, toning, coloring, combination cloud-printing and many other minor processes. Every photographer should own a copy of this book. Price, 25 cents each, post-paid.

# Eastman Kodak Company

ROCHESTER, N. Y., *The Kodak City.*

*Made with Kodak Portrait Attachment.*

## A WIDE USEFULNESS.

The Kodak Portrait Attachment enjoys a very much greater range of usefulness than its name implies.

*As a Portrait Attachment* it permits the making of large head and shoulders pictures limited only by the size of the film and at the same time, throws the superfluous and oftentimes irritating back ground out of focus. In fact, the Kodak Portrait Attachment affords to the Kodaker all the practical advantages of the long focus cameras without their weight and bulk. *As a long focus* attachment it permits the photographing of all small objects at close range on a large scale, sharp and distinct. It is, as the above illustration shows, particularly valuable for photographing wild flowers in their natural state.

The small compass of the Kodak permitting its being taken on many trips into the woods and swamps when the ordinary long focus camera would prove far too burdensome for comfort.

The Kodak Portrait Attachment is simply a small supplemental lens, so mounted as to slip on over the regular lens and in no way interferes with the regular use of the Kodak except to permit its working at close range.

When not in use, the Portrait Attachment is slipped off and may be handily carried in the vest pocket.

The Kodak Portrait Attachment is made for all sizes of Kodaks (except the Panorams) and Brownie Cameras, the price is fifty cents. Always specify what Kodak it is to be used with.

Any Kodak dealer will supply you.

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## LARGE PICTURES.

The majority of amateurs are wedded to the comfort and convenience of the small daylight loading Kodak; without such comfort and convenience, photography would cease to be a recreation.

Still there *are* times when large pictures are most desirable and in such cases, does it mean a return to the old pack-horse days of photography?

Not a bit of it. You can go right on enjoying your outings with your little folding Kodak and still make large pictures whenever you want them. The answer is bromide enlargements. There is nothing mysterious, complicated or expensive about the making of bromide enlargements. In fact, it is much less expensive and complicated than carrying a large camera would be.

In most cases, your Kodak can be readily transformed into an enlarging camera. To show you how simple this may be done, our booklet "Bromide Enlarging with a Kodak" is yours for the asking.

This booklet fully explains just how to adapt your Kodak for the making of enlargements and explains in detail every step of the process.

Ask your dealer.



IN CORRESPONDING WITH ADVERTISERS PLEASE MENTION PHOTO-ERA

## A ROYAL WELCOME.

Royal Velox is a success—progressive amateurs everywhere have been quick to see its many splendid possibilities and have afforded it a befitting welcome. Spring is at hand with all its subtle, elusive atmospheric effects, so beautiful in reality and so difficult to retain photographically.

Here is a field for Royal Velox; its soft mellow-toned stock magically blending the highest lights and intermediate tones so as to retain just the desired effect.

In attempting portraiture, the amateur often has to contend with strong contrasts, too brilliant high lights, difficult to subdue and bring into harmony with the lower tones, again the mellow tone of Royal Velox solves the problem.

Printed and developed in the ordinary way, Royal Velox affords a pleasing variation from the regular Velox tones, but when re-developed with Velox Re-Developer, the remarkably soft and clear Sepia tones place Royal Velox in a class by itself.

For every class of photographic work not demanding adherence to black and white effects, Royal Velox is fully adapted, and places in the hands of the amateur a means for securing many hitherto unattainable results.

Royal Velox is made in two grades, "Regular" and "Special", and on surface just rough enough to produce pleasing results.

All Kodak Dealers sell Royal Velox.

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## TANK DEVELOPMENT.

*The Demonstrator in Camera Craft.*

Getting off at a little station in Arizona, I located a worker who was doing a remarkably fine line of work and doing it in the most improved manner. Furthermore, he was doing it in the most simple, matter-of-fact way. It seemed that he had taken up photography through seeing how easy it was done by one of the regular visitors to the annual Snake Dance of the Navajos—Fred I. Monsen. Mr. Monsen, in addition to being an excellent photographer and one of the best lantern slide colorists in this country, is a lecturer who is held in the highest esteem by scientific bodies and the like. The success of his lecturing tours depends upon the results of his photographic work, and for that reason he runs no risk that he can avoid. He uses a film camera and develops all his exposures in the Kodak Developing Tank. But I am getting ahead of my story. When Mr. Monsen started to visit the Indian country a number of years ago he had to use an 11 x 14 camera and a battery of lenses, and my Arizona friend was duly impressed with the great effort and skill required to secure good photographic records. Later he found Mr. Monsen using a smaller instrument and for the last three years an ordinary pocket Kodak, and he began to think he could make a few photographs himself. When he learned that his former idol of the 11 x 14 camera was wedded to a pocket Kodak and a developing tank and could multiply reasons why they were more satisfactory and reliable, he secured an outfit and has enjoyed photography himself. A large camera and talk about a dark-room simply suggests to his mind that the user is old-fashioned in his ideas and has failed to keep up with the times. His own work certainly discounts anything that could be done with large plates and dark-room developing with the class of subjects which he secures.

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## HANDICAPPED.

When you purchase any chemical photographic preparation, you cannot determine by visual examination

whether it is all it should be or not. You have to take *somebody's word for it.* The question is just whose word to take.

In removing this handicap, you will have to consider motives—who is most interested in *your* welfare. It may be a purely selfish interest, but some one must be vitally interested in selling you good goods exactly adapted to your wants.

The answer is not far off. The manufacturer of the film, plate or paper you are using is the one *vitally* interested in seeing that you obtain what you should have. He must and does know the exact proportion of every ingredient in the goods he manufactures ; he must and does know just the proper proportions of each chemical for the proper compounding of the necessary developing, toning and fixing solutions and *no one else can know.* It is no temptation to him to use inferior goods or obsolete formulæ ; what might mean more profit to an outsider means a loss to him.

For his own interest, the manufacturer must protect yours.

Buy the developer, toning and fixing solutions made by the manufacturer who makes also the goods they are to be used with. Then all you need to look for is the label—and to see that you get it.

## DAYLIGHT'S ASSISTANT.

When photographing interiors the amateur has frequently to contend with one or more obstinate corners that refuse to be illuminated. Sometimes he lights the gas—then—fine. The dark corners show up well and he gleefully proceeds to make the exposure, but, alas !—upon development, the negative fails to show any material improvement.

The reason is this : gas light, while very bright visually, has but little action chemically and the additional illumination produces practically no effect on the plate or film without extremely prolonged exposure.

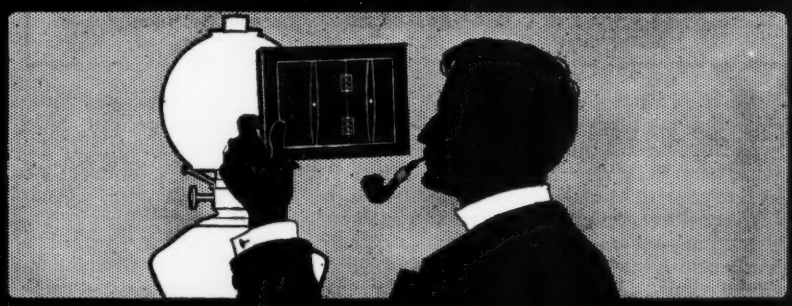
There is the simplest sort of a remedy for this and kindred illumination difficulties. Just a piece of cardboard, a pin, a match and an Eastman Flash Sheet.

Perhaps a whole flash sheet will be more than sufficient ; then how easy it is to reduce your assistant illuminant one-half, one-quarter, by simply dividing your flash sheet, with the advantage of working with a known quantity. Just a few experiments with the flash sheets will reveal their great possibilities and their use will more than frequently turn a mediocre negative into a good one and failure to success. Twenty-five cents will put you in possession of a whole package of Eastman Flash Sheets.

**Eastman's W. D. Platinum Paper makes prints which have all the characteristics of ordinary platinum yet require only warm water for developer and are cleared in acid and water. A simple, satisfactory paper.**

***Furnished in two grades, smooth and rough.***

***For sale by all Kodak dealers.***



# *ROYAL*
# VELOX

**A new paper with all the Velox simplicity but coated on a mellow toned stock that adds breadth and softness to the picture.**

**When sepia toned, with Velox Re-Developer, Royal Velox has the delicacy and charm of an old etching.**

***At all Kodak Dealers.***

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**Nepera Division,**
**EASTMAN KODAK CO.**
**Rochester, N. Y.**